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The
OIL WEEKLY

OIL and GAS ENGINEERING

FOR OIL AND GAS PRODUCTION AND PIPE LINE DIVISIONS

THE WEEK'S NEWS INTERPRETED

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VEMBER 14, 1932
67 Number 9

Take any five drillers in the world . . . at least *four* of them will say:

"*Yes!* HUGHES ROCK BITS are most dependable"

HUGHES TOOL COMPANY

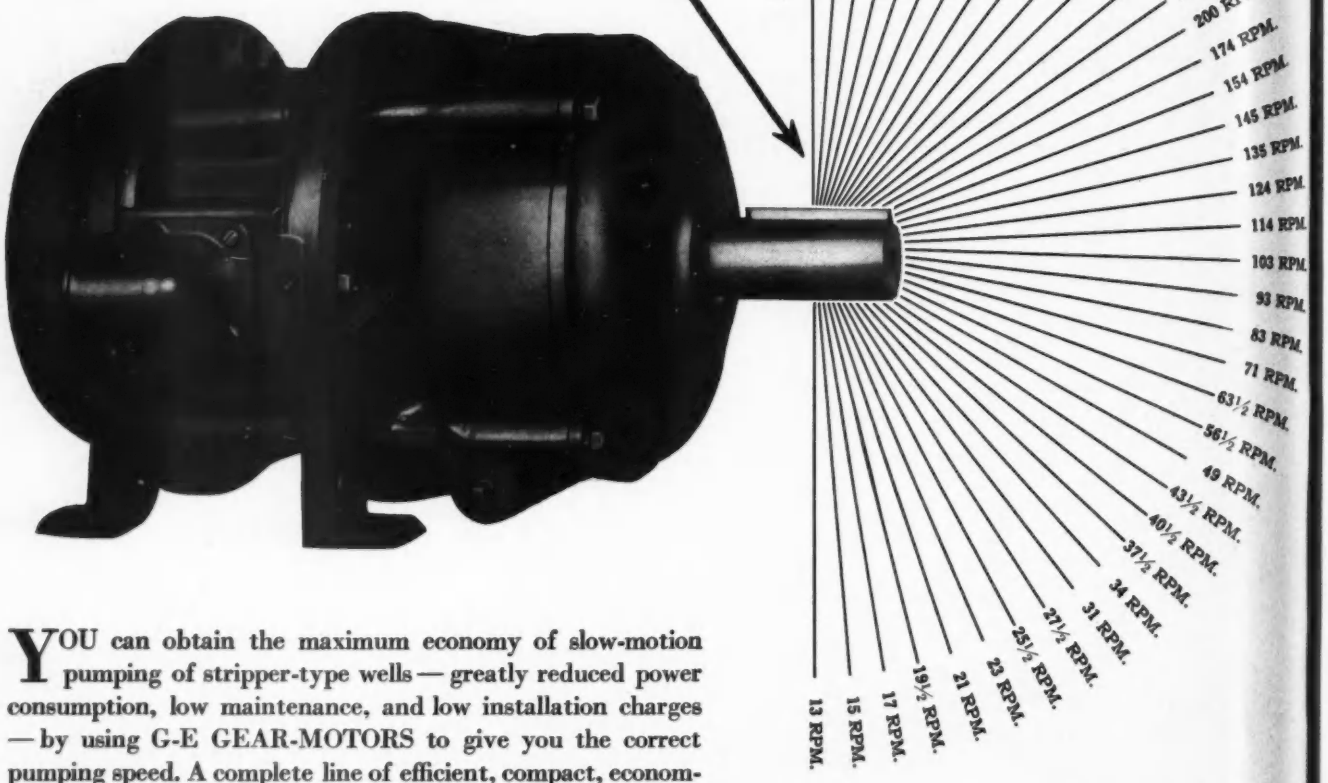
Service Plants:
Los Angeles, Calif.
Oklahoma City, Okla.
Midland, Texas

Main Office and Plant:
HOUSTON,
TEXAS

Export Offices:
19 Rector Street,
New York City

G-E GEAR-MOTORS

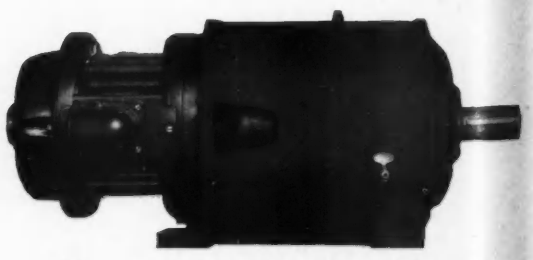
The low speed you require for Slow-Motion Pumping



YOU can obtain the maximum economy of slow-motion pumping of stripper-type wells — greatly reduced power consumption, low maintenance, and low installation charges — by using G-E GEAR-MOTORS to give you the correct pumping speed. A complete line of efficient, compact, economical G-E GEAR-MOTORS is now available to give you the required low speed direct.

The G-E GEAR-MOTOR combines the advantages of a normal-speed motor and efficient, internal,helical gearing, built into a single, compact unit that delivers the full rated horsepower of the motor at the output shaft. This single unit is easily handled and economically installed. Totally enclosed, accurately cut gears, bathed in oil, contribute to low maintenance and long life.

G-E GEAR-MOTORS are available in a wide range of motor ratings and speed ratios, in polyphase, single-phase, and direct-current types Complete information can be obtained from the nearest G-E sales office or G-E Motor Dealer, or from General Electric Company, Schenectady, New York.



G-E gear-motor, typical of designs for very low speeds

STANDARD 3-PHASE RATINGS
3/4 to 75 hp., 600 to 13 rpm.

Other speeds and horsepower ratings can be furnished on request. Speed adjustment can be obtained by selecting a motor with the necessary electrical characteristics.

201-231

GENERAL ELECTRIC

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

Smooth Working Wins—

Smoothness in the execution of plays makes the successful football team. Smooth working enables the Gaso Figure 1508 Power Pump to deliver maximum capacity with a minimum consumption of power and with a minimum of wear.

Unusual smoothness of operation in this pump is insured by Timken roller main and pinion bearings, continuous tooth Herringbone gears, and automatic lubrication of all working parts with a bath of clean oil.

Ask for detailed information on Gaso Pumps for any purpose.

GASO PUMP & BURNER MFG. CO.
TULSA, OKLAHOMA
Export Office: **New York, N. Y.**

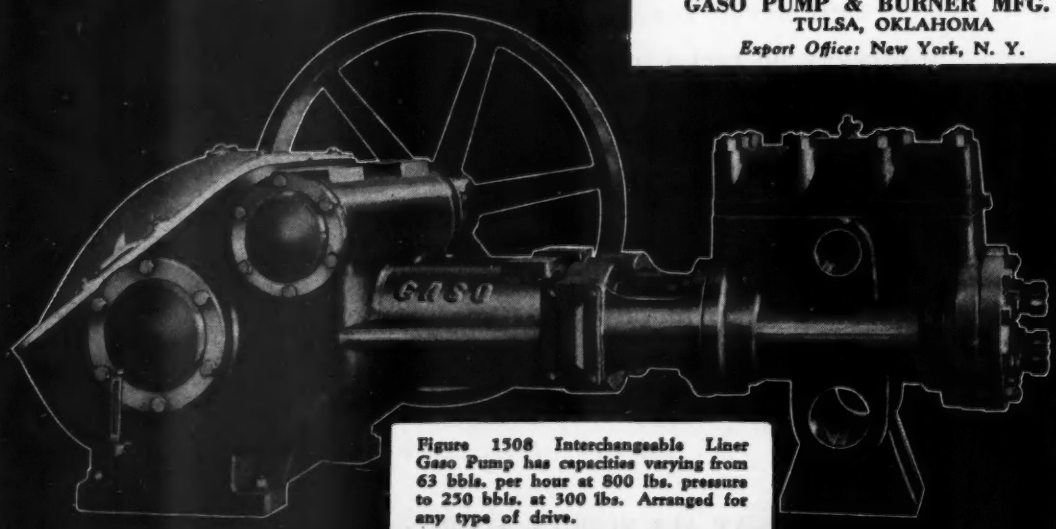
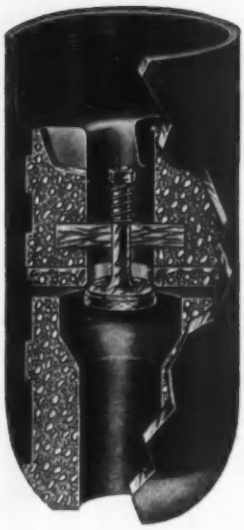


Figure 1508 Interchangeable Liner Gaso Pump has capacities varying from 63 bbls. per hour at 800 lbs. pressure to 250 bbls. at 300 lbs. Arranged for any type of drive.

GASO PUMPS

for every oil industry need

ANNOUNCING . . . *the NEW*



Larkin

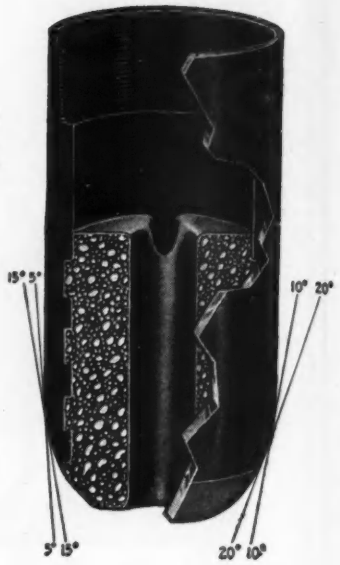
HERCULEAN GUIDE

for

FLOAT SHOES

and

GUIDE SHOES



An entirely new idea in guides. Sixty per cent of the tapered portion being on the shoe itself.

At a 20 degree angle the entire thrust or contact is on the steel shoe eliminating the possibility of breaking the concrete by coming in contact with obstructions in the hole.

It has greater strength than any other guide with absolutely no metal to be removed from the hole. Furnished on Float Shoes and Guide Shoes larger than 7″. Our regular Bakelite Guides furnished in sizes under 7″.

The Float Shoe is equipped with a water-tight positive acting Bakelite valve.

All valves are given a 2000 lb. hydraulic pressure test.

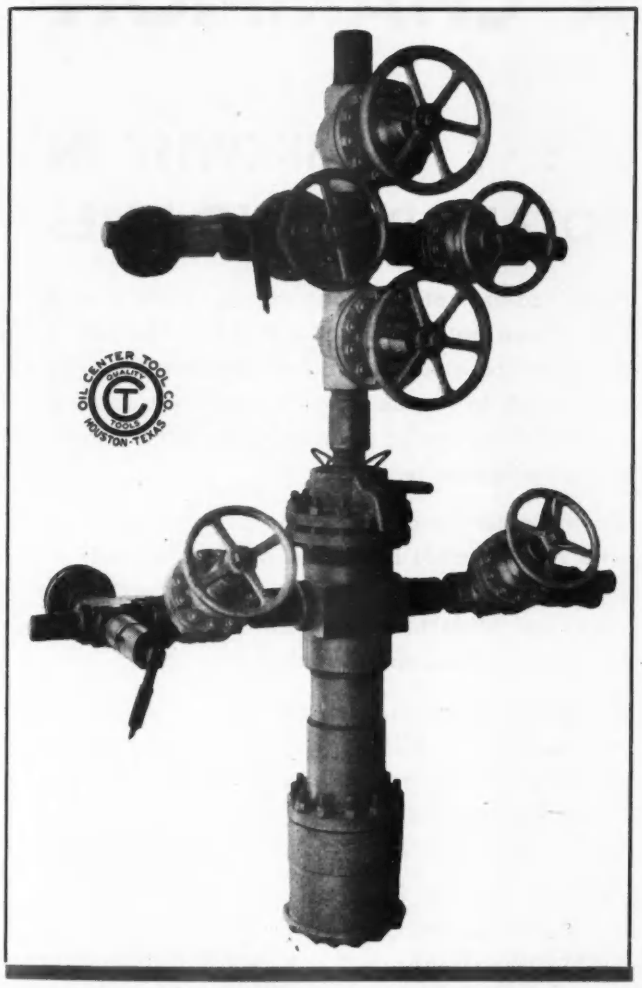
AT ALL SUPPLY STORES

LARKIN PACKER COMPANY

ST. LOUIS, MISSOURI HOUSTON, TEXAS OKLAHOMA CITY, OKLA.

***Warehouse Stocks at* Willow Springs**

GOOD TIMES ARE HERE



O C T Products shown in this hook-up, with the remainder of its complete line, are shown and described in

this NEW CATALOG . . . just off the press

for the Company that makes Better Products at a » Reasonable Price

WE ANNOUNCE, with pride, at this time, coincident with the convening of the A. P. I. in the home-town of our factory, a consistent increase in business through this period, reputed to have been the leanest in the industry's history. Our shops have not only continued to run full time during the past year, but have added men to the force.

Here's an advantage O C T Equipment has had this year in its chance for placement in new high pressure fields, whether it be with regular customers or with new prospects:

Name the field . . . check the Hook-ups

OCT LEADS

It's easy for the operator to buy a Christmas Tree Hook-Up for a new high pressure field when he sees it predominating in similar fields with satisfactory performance. O C T Forged Steel Tubing and Casing Heads, Chokes, and Forged Steel Christmas Tree fittings predominate in such high pressure fields as Oklahoma City, Hobbs, Pettus, Refugio and East Texas. It is only logical then that O C T Equipment should keep the lead in its line in such new high pressure fields as Conroe, Rabb Ridge and Mykawa, where they also predominate.

The Coupon below will bring a Helpful Book for Your Files.

We appreciate the fine, constructive work of the A. P. I. and heartily welcome the Oil Industry's leaders to Houston . . . . .

OIL CENTER TOOL CO.

HOUSTON, TEXAS,

U. S. A.

One of these NEW Catalogs Is Yours

Sign Here Now

Name and Title .....

Company .....

Address .....

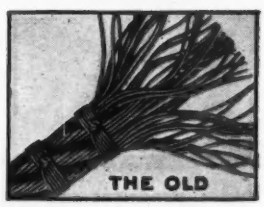
PERFECT CO-ORDINATION MAKES A CHAMPION

. . . . LIKEWISE IN ROTARY DRILLING LINES

Perfect co-ordination among strands results in wire rope service that is much better than average. Strand co-ordination is obtained only by preforming wires and strands so they carry their natural helical shapes . . . and therefore lie normally in position, without straightening-out tendency.

On the other hand in the case of non-preformed wire rope, strands and wires are held forcibly in position; which means that in work, strands and wires are subjected to unnatural fatigue due to torsional and unbalanced internal stresses.

Elimination of internal stress results in much better than average service. TRU-LAY Rotary Lines spool tightly under light loads, and are easier to thread through traveling block, crown block and eye in drum.



TRU-LAY lines are faster . . . due to less whipping, TRU-LAY can be spooled up faster. TRU-LAY Preformed Wire Lines are also recommended for sucker rod, swabbing and sand lines.

Send for complete information. Address:

AMERICAN CABLE COMPANY, *Inc.*
230 Park Avenue, New York, N. Y.

TRU·LAY
PREFORMED ROTARY LINES

A CHAMPION · BY MEASURE OF SERVICE

IN THE HEART of HOUSTON

. . . . for 'round the corner . . . . Main and Rusk . . . . where but a few days ago stood one lonely building . . . . the Second National Bank . . . . now tower Houston's finest . . . . tributes to broad vision and splendid foresight . . . . while in that bank . . . . its directorate . . . . and guiding hands . . . . are found a splendid projection of these self-same attributes . . . . quickened to meet the tempo of our day . . . . a veritable department store of finance.

THE LITTLE NEW YORK
OF THE SOUTH

SECOND NATIONAL BANK

ORGANIZED RESPONSIBILITY

Thanks to the miracle of the telephone, the smallest town is now but a few moments' away from the most distant metropolitan center. . . . . Unified control makes available to every community, in good times and poor, a single high standard of efficiency. . . . . The same principles hold true in oil well cementing. Only by winning and holding its dominant leadership could Halliburton make available to the industry the improvements developed, at a cost of hundreds of thousands of dollars, through its intensive field and laboratory research. Only under such conditions could Halliburton offer to the operators in quiet fields the same high standards of service as it gives to those in boom fields. Through such *organized responsibility* the industry is sure at all times of the scientific efficiency so essential to the life and productivity of its properties.

HALLIBURTON

OIL WELL CEMENTING CO.

Duncan, Oklahoma

THANK YOU, API...

You have made the buying and handling of oil industry equipment convenient.

You have sponsored helpful moves.

You have conserved time and material.

You have made us conscious of our indebtedness to a great basic resource and of our duty, through obviating waste, to preserve it to the benefit of future generations.

YOU HAVE MADE US PROUD . . . . . .

Other industries have pointed to your far-sighted work. They have marveled at your success under the handicap of the rapidly changing conditions of a nascent, growing, pioneer industry that is inherently in a state of continuous flux. That has made us proud.

» » » » » » » » » »

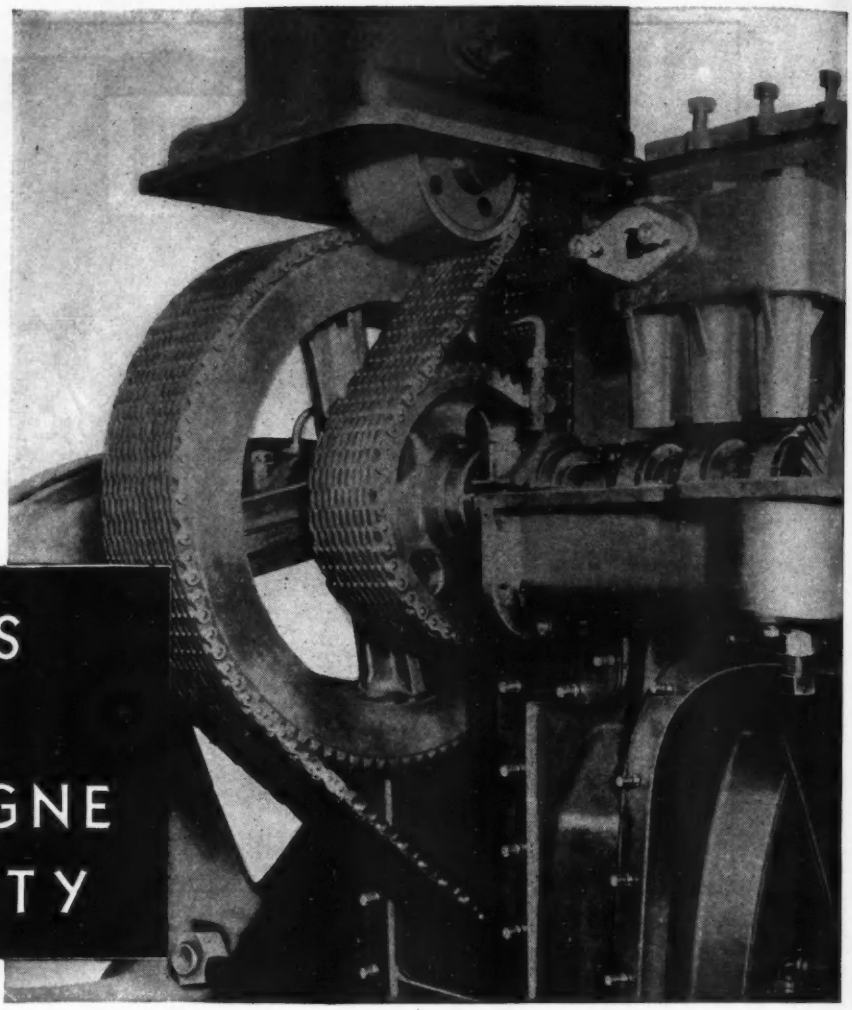
Often, you have called the Norvell-Wilder man into your confidence. This week, he will be attentive to your public discussions at the A. P. I.

"See You at the API"

— THE NORVELL-WILDER MAN

Norvell-Wilder *Supply Company*

BEAUMONT OVERTON HOUSTON REFUGIO SHREVEPORT KILGORE FORT WORTH LONGVIEW



REASONS for DE LA VERGNE SUPERIORITY

THE CAMSHAFT DRIVE . . .

Silent Chain— liberally proportioned to Last a Lifetime

Pioneers in every major improvement in the development of the present highly efficient solid injection Diesel engine, De La Vergne, appropriately, was first to adopt the silent chain camshaft drive, now used by many prominent Diesel builders here and abroad.

It is obvious that a chain drive, as compared with a gear train, provides superior service, as a chain contacts the sprocket at many points on its circumference, and wear and stress are distributed, while the usual helical gear train throws the entire load on the individual contacting teeth and, theoretically, with point contact only. The silent chain drive used in De La Vergne Diesel Engines is provided several times larger than design consideration would dictate for transmission of the horsepower required. This greater width of chain further reduces wear to a negligible minimum. The tremendous overload capacity of this chain is your assurance that it will never give the slightest trouble during a lifetime of service. According to our records, no De La Vergne chain replacement has ever been made with over 700 cylinders in service.

This silent chain is readily adjustable by means of idler rollers. Spray lubrication is provided for the chain and force lubrication for the shaft and idler bearings.

When you consider the purchase of a Diesel engine, look for such refinements in design and construction. It is such extra quality built into De La Vergne Diesel engines that distinguishes them in service as the smoothest and quietest running, most dependable Diesel engines ever built.

DE LA VERGNE ENGINE CO.

SALES AGENT FOR BALDWIN-SOUTHWARK CORP.
DIESEL DIVISION

PHILADELPHIA, PA.

Pacific Coast Representative: **The Pelton Water Wheel Co., San Francisco**

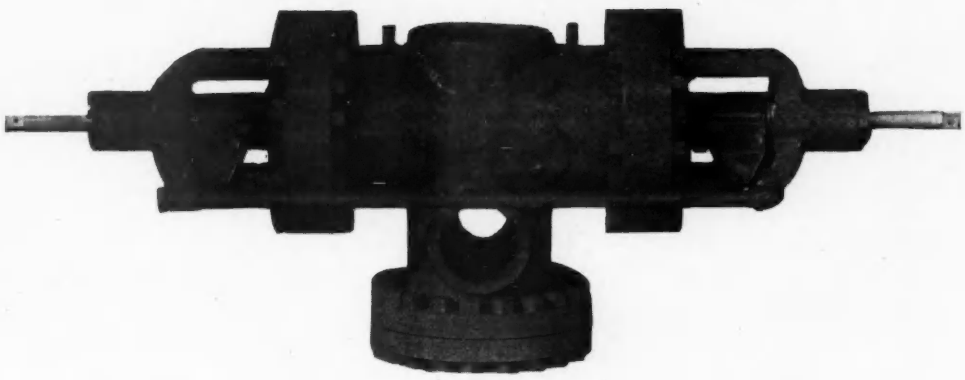
ANNOUNCING–

ANOTHER STEP FORWARD IN WELL CONTROL

•

Cameron's New "MP" Series Blowout Preventer

FLUID CLOSING - - - MANUAL OPENING



VALUABLE POINTS TO READ AND REMEMBER:

1. **This new design combines two proven principles of well control — Fluid operated and hand operated features both in one . . .**

   Danger warns, and the driller closes the rams instantly and securely through fluid operated feature by a mere 90-degree turn of a valve. This forces fluid under pressure to rear of the rams and securely holds them in place around the pipe that is in the hole. After the fluid has placed the rams in the closed position the rams can be securely locked by the hand screws. Danger past, he releases the rams manually, at his leisure.

2. **Connections for handling fluid are made from either boiler feed pump or slush pump or both, as desired. These connections are made when preventer is installed, and are always ready.**

3. **The new design permits converting of your manually operated preventer to this new and improved type at a very reasonable cost.**

4. **A *Single* Screw at each end of the preventer not only locks the rams in the closed position but also is used to release rams and completely open the preventer.**

CAMERON IRON WORKS

INCORPORATED

•

711 MILBY STREET

HOUSTON, TEXAS

Date .....

CAMERON IRON WORKS,
HOUSTON, TEXAS.

Gentlemen:

Please give me an estimate on the cost of converting my hand-operated CIW blowout preventer into the new MP Series, adding the fluid operated feature.

I am attaching information on my hand-operated preventer, including size, approximate date of purchase, extent of service, and its general condition.

Name .....

Company .....

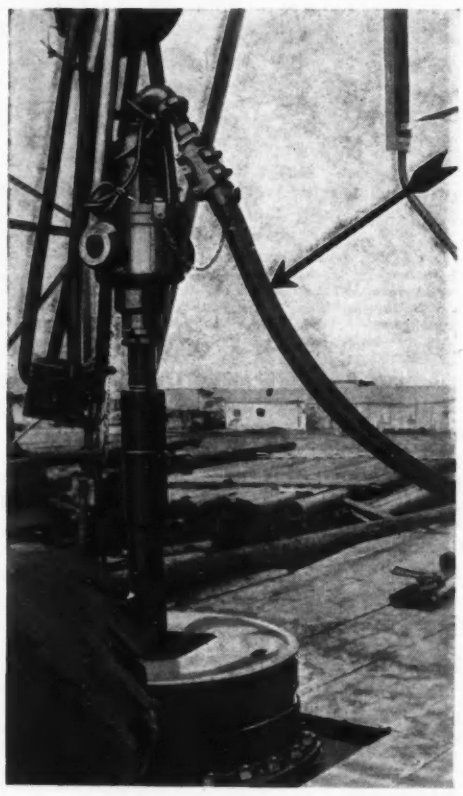
Address .....

Built *for* Highest Well-Head Pressures... *CHAMPION ROTARY HOSE*

THE full sweep of 25 years' experience in making oil well rubber products is injected into the engineering of this hose for deep well operations—especially where difficult formations create severest shocks and strains.

Drillers know all about hammer waves putting hose to the extreme test—that constant, sudden starts and stops call for the highest hose resistance. They know of the unceasing turbulence at the discharge ends of couplings. They realize only too well how good a rotary hose must be—but they naturally expect it to meet the demands. Failure of hose means delayed operations to say nothing of possible loss of property or even life.

Champion Rotary Hose is ready to go to work right where conditions are worst. It has the rugged, enduring strength suitable to the hardest task. Its heavy tube, strong fabric, high carbon steel wire and wear-resisting cover are built into a solid structure that looks squarely into the face of 5,000 lb. jolts and says "let's go."



Rotary hose is the weakest link in the whole circulating system but Champion is built to take that job confidently and courageously, and stay put—no matter how tough the going may be.

The Republic Rubber Co., Youngstown, Ohio

« » »

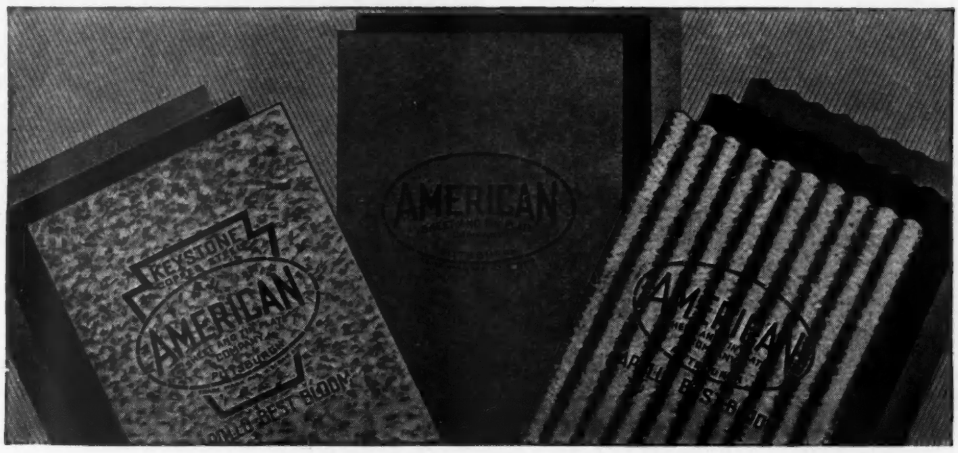
Mid-Continent Distributors:

FRICK-REID SUPPLY CORPORATION . . . **THE BOVAIRD SUPPLY COMPANY**

TULSA, OKLA. TULSA, OKLA.

AMERICAN

Steel Sheets for all OIL FIELD and Refining Uses



KEYSTONE

Rust Resisting Copper Steel Sheets

For Tanks, Barrels, Drums, Roofing and Siding

This copper steel alloy gives maximum resistance to corrosion, and is used by prominent tank, barrel and drum manufacturers. APOLLO-KEYSTONE Galvanized Sheets are also specially adapted for shops, sheds, boiler and belt houses, and oil country construction.

AMERICAN products are high grade and carefully manufactured in every detail—both mechanically and metallurgically and are adapted to all known purposes. Supplied in Black Sheets, Galvanized Sheets, Galvannealed Sheets, Special Sheets, Formed Roofing and Siding Products, Tin and Terne Plates, etc. Sold by leading metal merchants.

Also write for information on U S S STAINLESS and Heat Resisting Steel Sheets and Light Plates—particularly suited to the refining field. Send for literature.

US STEEL

American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

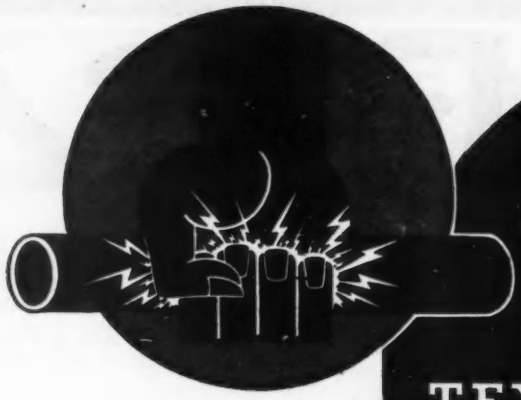
KEYSTONE AMERICAN

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

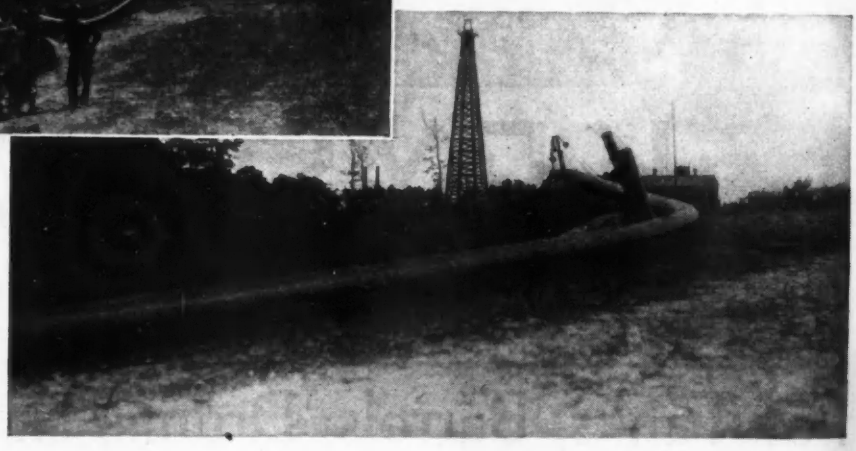
DISTRICT SALES OFFICES:

CHICAGO, ILL. - The 208 So. La Salle Street Building
CINCINNATI, OHIO - - Union Trust Building
DENVER, COLO. - - First National Bank Building
DETROIT, MICH. - - - - Buhl Building
NEW ORLEANS, LA. - - - 921 Canal Street
NEW YORK, N. Y. - - - - 71 Broadway
PHILADELPHIA, PA. - - - Widener Building
PITTSBURGH, PA. - - - - Frick Building
ST. LOUIS, MO. - Mississippi Valley Trust Building

Pacific Coast Distributors—Columbia Steel Company, San Francisco, California.
Export Distributors—United States Steel Products Company, New York, N. Y.



REPUBLIC *Electric weld* PIPE *in the* TEXAS PIPE LINE COMPANY *. . . line*



From Camps to Beaumont, Texas, stretches a line of 12¾-inch O.D., 40 lb. Republic Electric Weld Pipe, owned by The Texas Pipe Line Company.

The use of Republic Electric Weld Pipe for this line was a tribute to its many outstanding qualities, confirming the judgment of pipe line engineers the country over who have used it to the extent of more than 5000 miles in the last three years.

This pipe is made by a new patented process controlled by Republic. Clean, flat strip or plates are formed cold to a perfect round, then welded electrically by the resistance method. The result is a pipe as strong at the weld as in the wall—a pipe that is perfectly round, of uniform wall thickness, and clean inside and outside. Any degree of strength or ductility can be obtained through control in the making of the metal, making it excellent for suspended spans or bending.

Made in all sizes up to 16-inch O.D. in both steel and rust-resisting Toncan Iron, and in a wide range of wall thickness. Write for a copy of Catalog 210-B.

REPUBLIC ELECTRIC WELD

LINE PIPE • CASING • TUBING

REPUBLIC STEEL
CORPORATION
GENERAL OFFICES: YOUNGSTOWN, OHIO

AGAIN..*History is Made*..

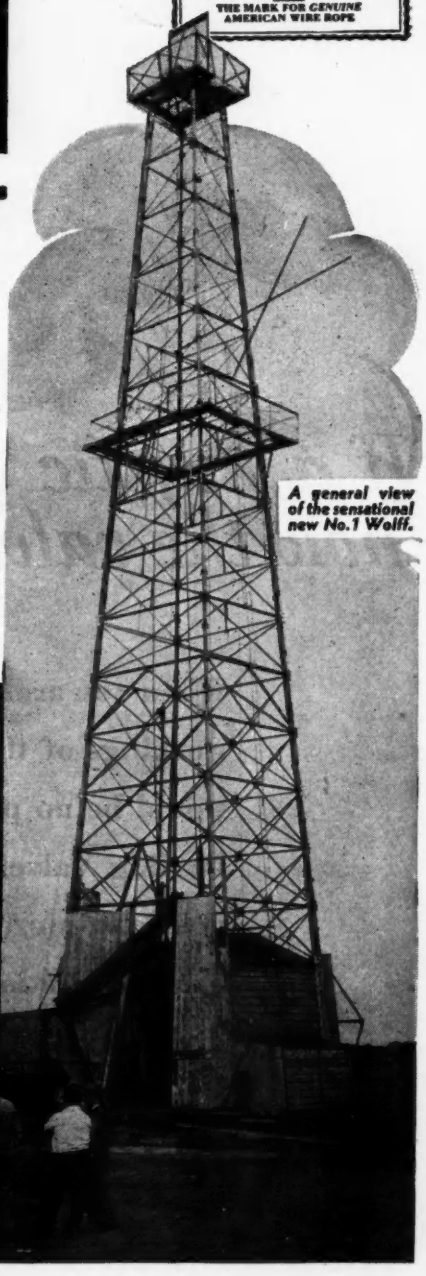
AMERICAN STEEL & WIRE COMPANY WIRE LINES

Bring in No. 1 WOLFF

Fourteen miles southwest of Perry, Oklahoma, history is being made—the development of an isolated well, No. 1 Wolff, promising a new major pool. Because of the great importance of the work—and the need for uninterrupted service—the drilling contractors, Mead Brothers, Tulsa, Oklahoma, utilized American Steel & Wire Company Drilling Lines, both Rotary and Cable Tool, and Sand Lines.

The TIGER TRADE MARK is a symbol of Strength and Dependability

THE MARK FOR *GENUINE* AMERICAN WIRE ROPE

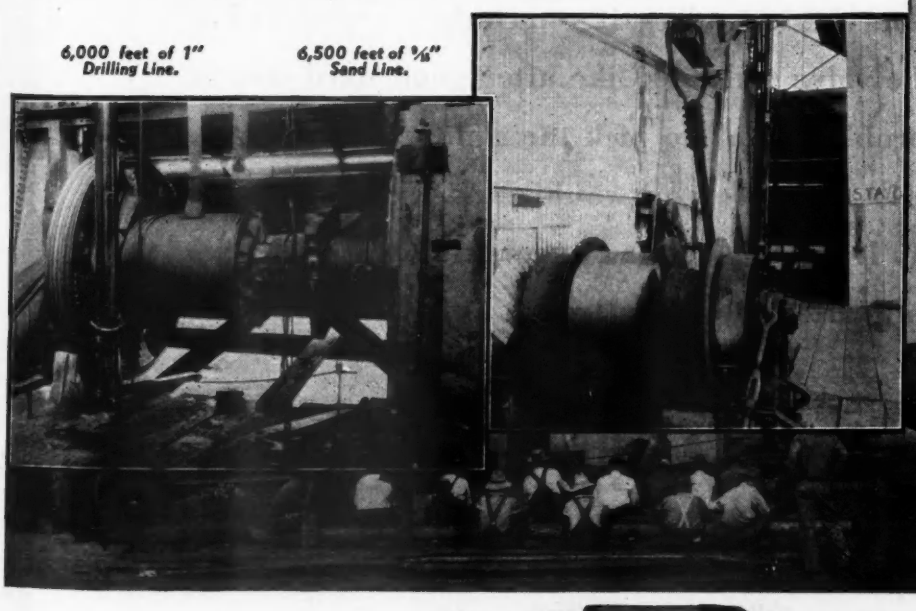


A general view of the sensational new No. 1 Wolff.

Wherever the going is tough—and the need for exceptional dependability exists—American Steel & Wire Company Wire Lines will establish remarkable records for their users. And—in less spectacular everyday work—where delays must be guarded against and economy is essential, these wire lines will be found in general use throughout the oil fields. Convenient stocks and our nearby engineers are both at your immediate call.

6,000 feet of 1" Drilling Line.

6,500 feet of 9/16" Sand Line.



1831 MORE THAN 100 YEARS of PROGRESS in WIRE MAKING **1932**

AMERICAN STEEL & WIRE COMPANY

208 South La Salle Street, Chicago
94 Grove Street, Worcester

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

AND ALL PRINCIPAL CITIES

Empire State Bldg., New York
First National Bank Bldg., Baltimore

Pacific Coast Distributors: Columbia Steel Company, Russ Building, San Francisco

Export Distributors: United States Steel Products Company, New York

If a mystic glass could show you how the valve parts will look in ten years

When you are purchasing valves, if you could see what inside workings of the valve will look like after good hard use, it would be no problem at all to pick the right valve. And the Darling Valve is the valve you would pick, even though it does cost more. It has the stamina to continue in giving first class service long after valves that cost a little less have been discarded.

DARLING VALVE & MFG. CO., Williamsport, Pa.

NEW YORK OKLAHOMA CITY HOUSTON

Mid-Continent Distributors: **International Supply Company**

California Distributors:

Hickey Pipe & Supply Company, 3375 East Slauson Avenue, Los Angeles, Calif.

DARLING GATE VALVES

BIG LAKE OIL COMPANY

Producers of

Reagan County High Grade

CRUDE OIL

and

NATURAL GASOLINE

Executive Offices
PITTSBURGH, PENNA.

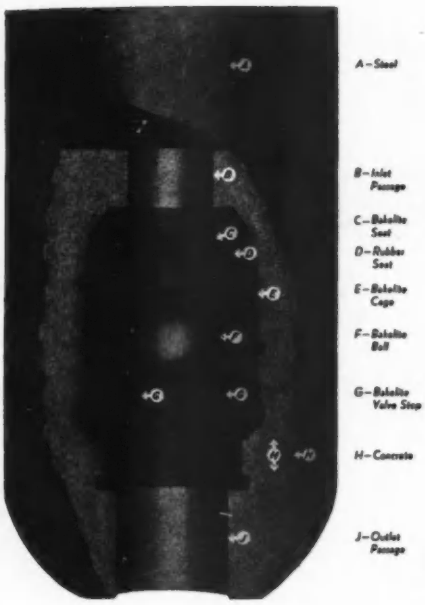
Field Offices
TEXON, TEXAS

Why Stop with Standardization of Sizes and Dimensions?

BAKER OIL TOOLS INC.

Drilling an Oil Well runs into MONEY . . . The Location costs Money . . . so does the Rig . . . but the HOLE costs most.

EVERY part of the Job is important . . . the wrong Method, the wrong TOOL may cost you the HOLE—the whole outlay.



THIS Cut shows the engineered Non-metallic Plug and Valve used in all BAKER Cement and Floating Equipment.
NOTE: "C" and "D".
The rubber valve seat insures instantaneous sealing at low pressures —important in Cementing. The Bakelite valve seat "C" will hold the highest possible pressures. *Note the large circulating areas through "B", "E" and "J".*

Who Makes Your Tools?

? Are they FIELD-TESTED?

?? Are they backed by EXPERIENCE and PRACTICAL KNOWLEDGE?

??? Are they UNIFORMLY of HIGH STANDARDS?

???? Have they PROVEN themselves?

Baker Oil Tools answer "YES"—day in and day out. Baker Oil Tools are DEPENDABLE. They have PROVEN themselves in every Oil Country in the World . . . They have been doing that for MORE THAN 25 YEARS.

Baker Guiding, Floating and Cementing Equipment is a good example of what is behind the Name. "BAKER" stands for practical knowledge and experience—high standards of materials and workmanship—"BAKER" stands for SERVICE.

Baker Cementing Equipment is made with an entirely non-metallic plug and valve, stronger than the collapsing strength of the casing . . . Yet with all this strength, this non-metallic plug and valve can be easily drilled up . . . or if desired, can be CORED THROUGH and a sample of the formation directly below the shoe secured.

Exclusive Features of design and construction make Baker Cement Equipment the ONLY TOOLS to use in your operations. That means STANDARDIZATION.

YOU can safely STANDARDIZE on BAKER Equipment with every assurance of ECONOMY and EFFICIENCY.

BAKER OIL TOOLS, INC.

Main Office and Factory

HUNTINGTON PARK, CALIFORNIA

Coalinga **Taft** **Houston** **Tulsa** **Oklahoma City** **New York**

THE OIL WEEKLY

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S. W. ROBINSON
Editor

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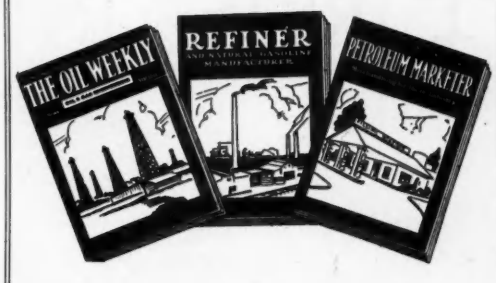

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R. L. DUDLEY, *President*

A. L. BURNS, *Gen'l Manager*

S. W. ROBINSON, *Editorial Director*

J. KENT RIDLEY, *Managing Editor*

NEW YORK: Room 323, 250 Park Avenue,
Dick Swinsky, Manager.

PITTSBURGH: 1407 Park Building,
W. W. Pigue, Manager.

CHICAGO: Room 1235, 141 W. Jackson Blvd.
Tom W. Nelson, Manager.

LOS ANGELES: 416 Haas Building,
W. E. Green, Manager.

TULSA: 913-916 Hunt Building,
J. F. Carter, Jr., Manager.

FORT WORTH: 203 W. T. Waggoner Building,
H. H. King, Manager.

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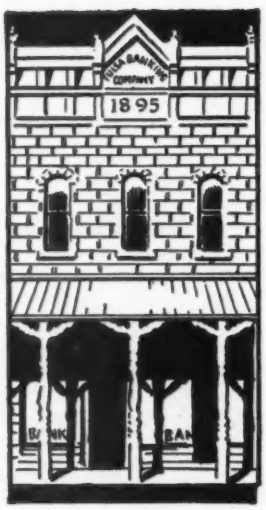
"FIRSTS" IN TULSA'S HISTORY . . .

In 1901 two customers of the Tulsa Banking Company drilled a well near Red Fork and achieved the fame of opening Oklahoma's first commercial oil pool. At that time, Tulsa's first Bank* was already six years old.



*Organized in 1895 as The Tulsa Banking Company, THE FIRST NATIONAL BANK AND TRUST COMPANY is now in its 38th year of constructive banking in Tulsa.

That Red Fork well grew into the great Mid-Continent petroleum industry. That pioneer Bank is now THE FIRST NATIONAL BANK AND TRUST COMPANY of Tulsa.

For almost four decades this Bank has continued to share the growth of Tulsa and the petroleum business, extending its contacts to world-wide scope, developing the specialized machinery of oil banking, serving. . . .

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THE FIRST NATIONAL BANK AND TRUST COMPANY

TULSA OKLAHOMA

VOLUME 67, No. 9 NOVEMBER 14, 1932

THE OIL WEEKLY

FOR OIL AND GAS PRODUCTION AND
PIPE LINE DIVISIONS

ENGINEERING • NEWS • STATISTICS

The Changing Panorama

As THE OIL WEEKLY goes to press it is apparent that much of the way toward a market demand law in Texas has been passed. The Senate and House committees have adopted bills which are essentially the same. The matter next goes to a "free conference" where a flock of amendments likely will be offered. Observers at Austin, however, seem to think that a bill will be passed. Whether or not it will have attached to it strings which will injure it or make it really dangerous, remains to be seen. Proponents of the bill seem to think that such amendments will not be passed and that a fair market demand law will result. Just what effect such a law will have on the present proration rules cannot be determined at this moment. Many seem to think that a market demand law will not materially affect most of the territories under proration, but such a law will wipe off the court records many injunction suits based upon lack of market demand law, and will see substituted therefor other suits testing the new law or alleging that a reasonable market demand exists for production now being taken out in violation of Texas Railroad Commission orders. Probably the biggest effect will be the clamping down of proration rules in East Texas where illegal oil has been produced in varying quantities ever since proration was first attempted.

Reports received by the American Petroleum Institute from refining companies controlling 93.4 per cent of the 3,856,300 barrel estimated daily potential refining capacity of the United States, indicate that 2,000,000 barrels of crude oil daily were run to the stills operated by those companies, and that they had in storage at refineries at the end of the week, 31,573,000 barrels of gasoline and 134,348,000 barrels of gas and fuel oil. Gasoline at bulk terminals amounted to 11,536,000 barrels and 1,061,000 barrels were in water borne transit in or between districts. Cracked gasoline production by companies owning 95.4 per cent of the potential charging capacity of all cracking units, averaged 433,000 barrels daily during the week.

Standard Oil Company (New Jersey) makes its position clear in the matter of refusing to meet the recent advance in crude prices in Texas and the Mid-Continent by reminding of its leadership in cutting the price nearly two years ago. At that time it pointed out a surplus of

The Oil Man's Calendar

NOVEMBER

15-17 *Thirteenth Annual Meeting, American Petroleum Institute, Houston, Texas, Rice Hotel.*

DECEMBER

5-9 *American Society of Mechanical Engineers, New York, N. Y.*

6-8 *Nebraska Petroleum Marketers, Omaha, Nebraska.*

9 *Independent Petroleum Association of Texas, Fort Worth, Texas.*

? *Rocky Mountain Oil and Gas Association, Great Falls, Montana, Rainbow Hotel.*

JANUARY

9-10 *Northwestern Petroleum Association, North Dakota Division, Annual Convention. Fargo, North Dakota, Waldorf Hotel.*

12-13 *Northwest Petroleum Association, Minnesota Division, Annual Convention. St. Paul, Minnesota, Lowry Hotel.*

FEBRUARY

15-17 *Ohio Petroleum Marketers Association, Columbus, Ohio.*

MARCH

23-25 *American Association of Petroleum Geologists, Houston, Texas.*

APRIL

13-15 *Petroleum Industry Electrical Association, Tulsa, Oklahoma.*

17-23 *Oil Equipment & Engineering Exposition, Dallas, Texas.*

20-21 *National Petroleum Association, Cleveland, Ohio, Cleveland Hotel.*

gasoline as the cause for cutting the price. Currently the reason for holding the crude price down is the "relatively small * * * volume (of gasoline which) determines the wholesale prices of products." Overlooked is the premise upon which the advance was based—that higher prices would curtail output of crude and while serving as a means of conserving crude supplies below ground, also by scarcity withhold supplies of cheap crude from the creators of the surplus of gasoline which is responsible for demoralization in the refined market. There is an element in this industry which holds to the idea that oil does not differ from other commodities in that the price of the manufactured product is regulated by the cost of the raw material. The two big Standards hold that gasoline determines the price of crude. Certainly all wisdom is not centered in them. On the other hand, Mid-Continent producers who fought to keep those companies from using their South American crude in this market can hardly expect too much friendliness in further improving their position.

The East Texan

What manner of man is this that threatens riot and insurrection if certain things are done or not done in East Texas? Out of that area that makes up the great East Texas oil fields have come some of the highest type of citizens—and they are all good citizens there, but there is an element which for years has been pressed down by the poverty of a small farm on infertile ground. When oil was struck these "natives" saw the light of a better day. Many of them have sold their birthright to the unscrupulous among the royalty dealers who invaded the country, but a substantial few still have their royalty and they know that its value depends both upon prolonged recovery and a fair price for the oil. They are still Anglo-Saxon in the early American sense and their continued up-hill fight to eke out a living from an unfriendly soil has kept them frontiermen. They will take matters into their own hands if they feel their rights are impaired.

Page 24.

Gulf Coast Reserves

Oil reserves in the Gulf Coastal Plain seem to be a whole lot like the widow's meal barrel; every time it is estimated it shows more. Continually deeper drilling and possibilities of still greater depths have contributed to making this area the most important potential oil source on the North American continent at this time. New fields and new prospects extend from the Mexican border on the southwest to the Mississippi River on the east, and above the original coastal area looms another strip that is just beginning to reveal its possibilities. The whole story, conservatively told, almost approaches the most romantic picture of the promoter of a few years back. General conditions have forced conservative aggression in exploring these possibilities, but the aggression is more sure because of its conservatism.

Page 53.

It takes long vision to see over the mountain of overproduction in East Texas and the other currently flush areas, but there are many in the oil industry who are looking into the future. Seeing need in coming years for dependable sources of production, many operators are extending their operations into the southern portion of Texas—along the Gulf Coast and the strip above, and into Louisiana.

Page 27.

THE annual meeting of the American Petroleum Institute, which takes place in Houston this week, is the most important affair in the Petroleum Industry each year. It brings together at one time and place the outstanding leaders of the industry as well as most of the engineers and operating executives.

The many business and technical sessions of the Institute serve to crystallize into definite form the leading thought of the industry from both economic and technical points of view.

Action taken at these meetings and the technical data presented are of vital importance to everyone engaged in the oil industry.

Full Reports of those matters of interest to the production and pipe line branches will be presented in the November 21st issue of THE OIL WEEKLY, from four to five days in advance of any other oil publication.

Operators of the Cumarebo field in Venezuela have worked out a nice system of flowing all wells by gravity into a central separator and field storage tank. All wells tie into one six-inch line, and to take care of individually gauging wells, a smaller pipe is also laid to special separator and tank where the individual well's output may be measured.

Page 49.

Sinclair will not move into the Pacific Coast—yet. Its bid for Richfield's properties was grounded when the sellers decided that Standard's offer was less in figures but more in value.

Page 23.

Market Demand Law *Strengthens Conservation* Statute in Texas

FINAL passage of a conservation measure based on market demand for determining the output of Texas oil fields was assured last Thursday, when both the Senate and the House adopted bills of similar nature. The two will go into a free conference, which is slated to adjust differences and allow the complete measure to be presented to Governor R. S. Sterling for approval.

The bills passed are modeled after the Oklahoma statute which takes the market demand as well as economic waste of crude oil as its authorities for determining the production of oil fields. Amendments of the Senate must be made acceptable to the House. One of these provides that the measure shall expire September 1, 1935. This provision was voted down in the House. Another amendment in the senate bill is that allowing the Texas Railroad Commission to be guided by the price of gasoline when determining the output of the oil fields in the state.

The statute that will come out of the free conference will take the place of the present proration statute, which is based on physical waste for determining the allowable of Texas oil fields. The legislature met in special session to consider the market demand bill, following the decision of three federal judges, who gave an adverse decision on the administration of the physical waste statute.

The market demand measure had the backing of state officials, especially members of the railroad commission as well as producers of crude oil of all classes. There was also opposition to the bill.

Joe Danciger led the opposition to the bill. Before both the Senate and the House he offered testimony in an effort to show that the bill would result in the major integrated concerns gaining still more vicious control of the production of oil in Texas. He severely criticised the railroad commission both for its past practices in handling proration and for what he termed an effort to gain further control in the new statute.

Claude Wild, vice president of the Independent Petroleum Association, denounced the bill from the speaker's stand of the House as economically unsound as well as certain of running into adverse court decisions.

Nazro Argument

Perhaps the strongest case against the measure came from Underwood Nazro, vice president of Gulf Production Company, of Houston, who appeared at the request of a member of the Senate. He reviewed the stand of himself and associates before the special session of the legislature, which enacted the present proration statute, and said that the opinions expressed then were still held. One statement before that session was repeated, of which the following is a part:

"We are not in favor of schemes, whether voluntary or compulsory, which will have the effect of restricting or controlling bargaining and the free operation of the economic law of supply and demand, or that will destroy competition."

After making the point that the market demand for oil fluctuates with its price, he pointed out:

"It is impossible to say that the market demand for oil is any definite number of barrels per day or month or year, unless you also state the price at which the oil can be obtained."

He mentioned attempts of governmental agencies to stabilize the prices of other commodities in the past and mentioned the result. The certainty of the new bill being brought before the courts with the possibility of adverse decision was mentioned. He further stated that the market demand measure will require still more intricate decisions of the railroad commission, since it will be forced to consider scientific testimony.

His recommendation was that the present law based on physical waste be given a fair trial by the commission. He made a point of the fact that the three federal judges had not held this law unconstitutional but had held that the commission had not followed the intent of the statute.

"Why not give our present law a fair trial?" he asked. "The commission should investigate the facts in the East Texas field and enter an order designed to prevent physical waste alone, without regard to so-called market demand or economic waste. The commission should then, following the legislative mandate in the present law, enforce their orders without discrimination and without attempting to add to or take from the present statute. It seems wise to us, at least, to have that done once and see what will happen before reaching the conclusion that any new legislation whatever is needed."

Commission Heard

C. V. Terrell, chairman of the Texas Railroad Commission, E. O. Thompson, commission member, and R. D. Parker, chief supervisor, were the first witnesses in behalf of the bill. Chairman Terrell was certain that the body had the facilities for determining the market demand for Texas oil, despite the fact that world markets would have to be considered. Both Thompson and Parker gave testimony of similar nature.

Charles F. Roeser, vice president of the American Petroleum Institute, was one of the independent producers who favored the measure. Carl Estes, fiery editor of Tyler, as well as producers of the East Texas field favored the measure. Landowners of the East Texas fields favored it also.

Expressions in behalf of the measure came from many sources and from many classes of individuals in their relations to the oil industry. The tenor of all this testimony was to the effect that a statute with market demand and economic waste as the basis for determining field output is the only solu-

(*Continued on page 68*)

Standard's Offer For Richfield Accepted

Los Angeles, Nov. 11.—Bank creditors and bond holders committees representing Richfield Oil Company have agreed to accept the offer of Standard Oil Company of California to purchase the assets of Richfield Oil Company and Pan-American Petroleum Company.

These committees announced November 10 that Standard Oil Company's offer of about $22,500,000 had advantages over Consolidated Oil Corporation's bid which appears to have a current value of more than $27,000,000.

In accepting the offer, it was pointed out that Standard Oil Company offers guaranteed debentures which do not follow bonds or preferred stock of any kind, while Consolidated Oil Corporation has around $64,000,000 in bonds ahead of the debentures.

East Texas Landowners Buy Buckshot *as* Legislators Meet

Due to many conflicting statements as to just what will happen in East Texas in case Proration rules can not be enforced, The OIL WEEKLY sent a representative into East Texas, not to talk to oil men but to find out what the landowners and royalty owners thought of the situation and the very interesting article presented is the result of that assignment. The article was written before action had been taken on the market demand law.

EAST Texas oil field rests serene on the surface to the casual observer. But underneath is a sub-surface mountain of dynamite needing not a too forceful blow to explode.

One cannot reach another conclusion after listening to the vehement, dead earnest protestations of about a hundred royalty owners and farmers against any action that might tend to cut down either the longevity or the volume of their income from oil.

They are afraid, some of them, of the weakness of proration forces. They are afraid of the strength of proration's opponents. Many of them stand resolved to deal in their own way with factions which might bring an untimely end to their paradise. They will give law and order a fair trial to handle affairs. But their patience will not be that of the long suffering Job. They will act.

Nothing is comparable to the undercurrent of feeling among them unless it be the rumbling of a volcano on the verge of eruption.

Regulated and controlled production has come to mean only one thing to the average farmer holding producing property in East Texas. It sticks in his mind as the only way of getting the most possible dollars from his farm.

He is not particularly interested in the amount of oil to be recovered. In his words he does not "give a damn whether they get enough to grease a skillet."

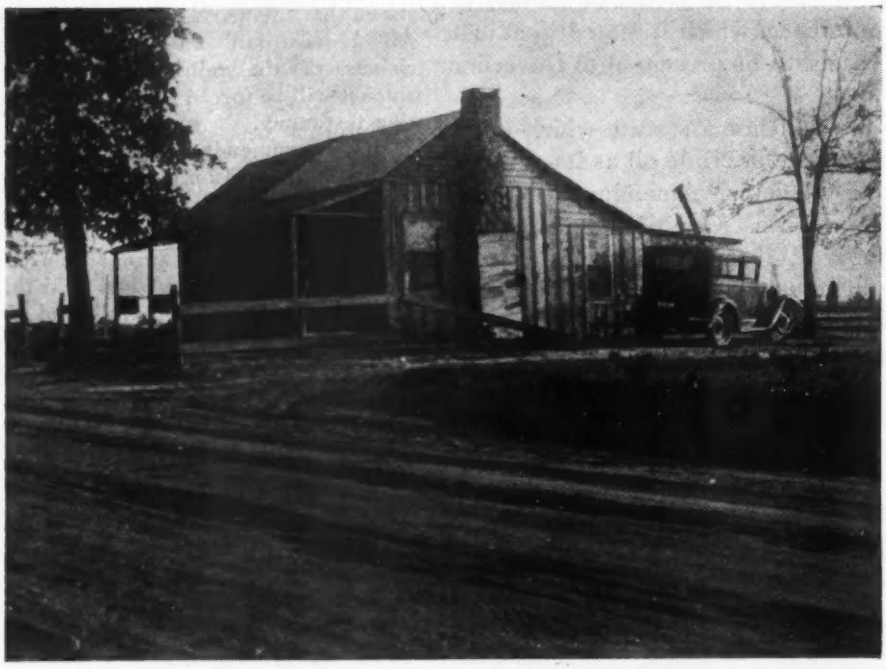
But he is interested, vitally so, in keeping the price of oil at least to its present level. He is like the ant in preparing for winter, in preparing for days to come. Royalty provides food for him. He wants that royalty to continue rolling in.

It is his conviction that uncontrolled production would deal two painful blows. First and worst, it would lower the price of oil. Second, it might cut short the life of the field—possibly making it necessary for him to resume what has at best, for the last decade been an arduous, misery-ridden occupation.

Speaking reminiscently of farming, and prophetically of controlled production, one ex-cotton grower and ex-timber cutter declared:

"I claim ten year of it give me a bellyful, and I ain't a' going back to it if it kin be hepped."

Whether his conviction is right or not, the East Texas farmer *knows* it to be right. Thus, the courage of his convictions is fortified.



A TYPICAL EAST TEXAS FARM HOUSE
"Ten years give me a bellyful and I ain't a' going back to it if it kin be hepped."

East Texas land, some even unfit for hog-raising, is means of creating wealth for "these sons of the soil."

If law and order can keep East Texas from breaking the market, well and good.

Tired of Evasions

But some of the royalty owners are getting sick of legal injunctions which stand in the way of proration enforcement. And they will not, or rather do not, tollerate illegal violation of proration rules, except in a few instances.

If a source generally regarded as reliable can be accepted, the federal court is also getting sick of injunctions. It is said Judge Randolph Bryant has about 300 applications for injunctions on his desk, which not only interfere with his golf, but the granting of which might not jibe with his idea of what is best for his fellow East Texans.

So, if actions of those opposing controlled output, whether sanctioned by court injunction or not, give the East Texas landowner the notion that his personal rights are being trampled on, hell will break loose. (Small doses of it have already.)

Why?—Get this picture of him and you will understand why.

Your East Texas farmer is no melting pot product. Foreign sounding names are rare enough in his community to be conspicuous. In ancestry, instinct, custom and action he is pre-eminently Anglo-Saxon.

Grim visaged sons of the soil many of them are. From the solid block of pine and oak timber that covered the rolling, red hills of East Texas they hewed out clear spots to cultivate crops. Bitterly they kept alive. Constant labor, back-breaking toil have been their lot for generations. It had to be. Nothing less could ward off starvation.

The East Texas progeny of early Americans have carried on. They have endured and survived that which has killed others, or turned them back in defeat. They have had to kill to keep from being killed. First it was Indians. Then criminal fugitives from Eastern justice who sought to levy toll from East Texans on their westward trek to the impregnable fastnesses of the Big Bend. Then other and miscellaneous breakers of law and order.

All of it was done on the defensive, so to speak. All done in protection of what the East Texan considers his "private rights."

Part of the nucleus of East Texas settlers originally pointed their prairie schooners to the barrens of West Texas. They could not find enough water and retreated to East Texas, where, as one farmer said, "they sot and settled."

Waiting for the tell-tale results that spell comforts and pleasures or the resumption of "back-breaking toil."

These East Texans, progeny of early Americans, have definite views as to their "private rights."

On hillsides where springs flowed they built homesteads. Game and fuel also abounded, so did human and natural elements ever trying to make their existence sore trial and tribulation.

Some of the early settlers were plantation men who brought slaves with them. They were accustomed to command and be obeyed. Their fortunes already made, they were merely striving for more, though such entailed great hardship.

But rich settler and poor settler stuck it out, most of them to eventually wonder why. The rich to lose, mainly—the poor to barely break even, or worse.

Still a Frontier

The frontier spirit still lives in East Texas. So do some of the old timers. Protection of one's heritage is part of their religion. This has been drummed into the sons who now occupy all walks of life, but who are primarily farmers. They know no social class. They have, generally speaking, all been so poor for so long that they don't understand the distinction money generates in less wholesome strata of humanity.

Men who have helped carry them over

the rough spots, through the years of poor crops and of no crops at all, say that hardly one out of 20 has been able to more than pay taxes on his farm for 10 years. They have seen their property dwindle in value—seen their crops bring less and less each year. In some instances they have watched with eyes desperate, yet helpless, the ravages of malnutrition among their children. And they have understood the cause. Poverty. They have yearned for things for the children that the meagre returns from cotton and timber could not bring. He who has halfway tried to learn knows that only stark courage, raw courage, has kept their heads above the water.

Then Oil

Then oil was found in East Texas. Oil, the magic golconda. Oil, that overnight changes ragged Cinderella into a princess.

But, generally speaking, the farmer got practically nothing for his land. As one of them said in a tone that indicated he felt someone had made a fool of him, "What in the name of hell fire did I know about oil property? Jim, here was the same. When it come to thinking what it was worth, this here oil, we didn't know skunk smell from wild honey. That's a fact."

Some of them sold what they thought was one-fourth of their royalty, only to find that after the papers were signed and recorded they had signed away all of it—had been "city-slicked," as it were. Generally there was no recourse

Most of them did not realize the value of oil rights they sold for a relative pittance. They almost gave the leases away. They know this now.

But the royalty has been rolling in to them. You can look at the breakfast table and tell that. The sow belly, thickly sliced and greasy, has been replaced by thinly sliced, store-bought breakfast bacon.

And the revered backbone of the community, the farmer's wife, looks into her lap at hands enlarged, misshapen, bruised and calloused by drudgery and allows "as how little Mary's will look more like a lady's ought to when she grows up, now that oil is a 'flowing on the farm."

"Pa ain't a'havin' to get out in the rain so much with his rheumatism."

"Johnny went all he could to that school up the creek three years ago. But he's traded off that scrub sorrel pony f'r a flivver so's he can drive up to Longview every day where they got more grades."

Those few quotations, picked up here and there throughout the district covered by the great field, show in a small way what royalty has come to mean to some of the farmers.

Melodramatic? Rather. But that's life in East Texas.

With royalty money East Texas farmers have tasted some of the simple luxuries of life. They like these luxuries. Keenly relished are the changes in living made possible by them. It is refreshing to watch their effect.

But they have not forgotten long years of privation. They seem to feel, quite a number of them, that they are fully entitled to these luxuries, simple though they be. They feel like they have fought enough to deserve them.

In most cases, royalty is all on earth they have. *And they know it.*

If the writer is any judge of human nature, East Texas farmers and royalty owners will fight to keep that which they fought to gain.

Let authority weaken in some manner that will take from them the value of that which they consider their heritage, and they will need only a leader and a battlefield.

Whether right or wrong from the oil industry's point of view, they feel their only hope is some sort of program which will guarantee sustained and regular income.

And right now, as they taste the sweets of life, they are worried. They are afraid. They fear opponents of proration, through legal steps or otherwise, will wreck the industry which furnishes them food—and candy. They are watchful. They want the rangers to stay on the job and watch with them. Nowadays they figure Governor Sterling saved their fortunes by throwing the rangers and soldiers into East Texas when he did.

To quote W. R. Nicholson, owner of considerable acreage in the field, "Why, I wouldn't be worth thirty cents if the governor hadn't done what he did."

Mr. Nicholson is potentially wealthy, if not already. He is law-abiding, and with the wisdom bespoken by the gray of his hair, did not say just what he would do if wells on offset leases were thrown open while those on his own were forced to produce in accordance with state regulations.

Neither did he say what he would not do.

But he was frankly alarmed over what Tom, Dick and Harry, possibly not so level-headed as himself, might do. One of the Tom's, Dick's or Harry's said, in fact, "Why, you don't think I'll let them get away with that?"

For perfectly obvious reasons, other prominent East Texans were reticent to state what they would do, and would not do, if the field broke from control. But each of them appeared strongly impressed with the feeling that the landowner situation, with reference to proration, was seething violently beneath the surface and that there was a significant disposition to "show the claw behind the velvet paw."

Referring to trucks illegally taxing oil from wells after dark, and illustrative of some of the land owners' attitude toward the action, the common effect of a not infrequently heard remark is, "Jes let me ketch him back up to my well and I'll drape his goddam guts over the Christmas tree."

You who read this know about the numerous mass meetings of landowners that have been held in Tyler and other points about the field. Utterances at those meetings tell the story. Here are some of them:

"East Texas oil field must be held to

(*Continued on page* 66)

What was done to derrick foundations of a Shell well after somebody, "they ain't saying who," dynamited it.

Companies Entrenching *In Gulf Coast for* Future Reserves

JACK LOGAN
Staff Representative

"An analysis . . . indicates that present known recoverable oil reserves in the United States are of the magnitude of 10 billion barrels . . .

" . . . at the current rates of production the equivalent of our present known oil reserves will have been withdrawn from their underground reservoirs in 10 to 12 years . . ."

THE above excerpts are from the recent report of the Federal Oil Conservation Board to the President of the United States, dated October, 1932; and the ideas expressed, although almost paradoxical in view of current concern over "overproduction," are thoughts which must obviously exercise a dominant influence on the policies, plans, and actions of oil companies and individuals expecting to continue their operations into either the near or the distant future.

The import of the above facts is that in order to maintain the country's present relatively small margin of reserves the United States petroleum industry must each year find oil supplies equivalent to those the country is consuming—roughly a billion barrels a year. During the past two years the industry has fallen short of that quota, and recognizing that it has, many of the oil companies have become intensely active during recent months in trying to build up reserves for themselves as protection against a possible general shortage of oil a few years hence, while still others in large numbers are beginning to exhibit a similar concern.

In looking about for possible sources of those new, undiscovered reserves, it was but natural that the industry should turn first to areas offering outstanding possibilities; and consequently there has developed during recent months a concerted fixing of attention, a general mobilization of exploration forces, upon the coastal plains of Southern Texas and Southern Louisiana—the vast region, stretching 600 miles southwestward from the Mississippi River to the Rio Grande, and paralleling the coast line for a distance of about 100 miles inland. For that region is a "happy hunting ground" which is generally conceded, more readily today, probably, than ever before, to have immense possibilities, not only from the standpoint of exploration for new fields, but also with respect to further development and deeper exploration of fields, salt domes, and structures already found.

The region which is described is as large as the total areas of some of the larger states of the union. In its eastern portion lie the numerous prolific salt dome type oil fields of the Louisiana marsh lands and of Southeastern Texas, and at its southwestern extremity, lying roughly between the Colorado River and the Rio Grande, are related fields which do not give definite indication of being salt domes, but which have established themselves as important sources of oil and gas, particularly during the past several years.

In the period of more than 30 years since it first produced oil, the coastal country has yielded approximately 980,000,000 barrels of crude petroleum and it is naturally not strange that during that long interval there have been times when it seemed that possibilities for additional new fields were almost exhausted, and that a steady decline in production was in prospect.

But during the past decade each additional year has brought an upward revision of the future oil-producing possibilities of the area, due primarily to changes and progress in three forms: (1) introduction of geophysical prospecting, a new science, involving application of the laws of physics to geology, which has greatly simplified the problem of finding new salt domes and structures with which oil is commonly associated in the district, (2) the capacity for drilling to greater depths, making possible the important deep production now being developed in both old and new fields, and (3) greatly increased interest during recent years in the southwestern extremity of the Gulf Coast region, lying past the limits of the regular salt dome country, beyond the vicinity of the Colorado River, particularly since 1928, when discovery of oil in the Refugio gas field precipitated further development of established gas fields and led to intensive searching for entirely new fields.

Geophysics

Geophysics was first introduced on the Gulf Coast about 1922, soon began revealing new salt domes, and by 1926 was bearing fruit in actual oil production. About the same time the first fields of the Laredo district at the southwest extremity of the Gulf Coast were being discovered. Also in the meantime important strides were being made in deep drilling, 5000-foot wells becoming somewhat common, a few going below 6000 feet, and rejuvenation of the famous Spindle Top field through discovery of prolific deep oil sands greatly stimulating deep drilling, with the result that today numerous fields produce from below 5000 feet, among them being one with production from almost 8000 feet, while the practicability of drilling below 9000 feet has been demonstrated in two different wells.

The complete revision of Gulf Coast potentialities brought about during the past decade under the three dominant influence which have been mentioned is impressively revealed in comparative statistics.

In 1922 there were in the coastal country, from the Mississippi to the Rio Grande, but mostly in the regular salt dome country, 36 fields which had yielded oil or gas. By now the number has been increased by almost 400 per cent, reaching 132. The latter figure includes 33 fields in the Louisiana division of the Gulf Coast, 47 in the salt dome region of Texas, and 52 in the Texas Gulf Coast trans-salt dome region.

To show that the current year, with its relatively low volume of field work for the United States as a whole, has brought no interruption of the erstwhile brilliant record of new oil field discoveries in the described Texas-Louisiana region, it may be pointed out that oil and gas production have been discovered in 1932 in 12 different areas in the region.

To show, furthermore, that vast possibilities still remain for the opening up of new fields, as well as for extensive further development of fields already on production, it may be cited that there are 23 known salt domes along the Gulf Coast, definitely proven as such by drilling into cap rock or salt, which have not yet produced any oil or gas, but which are of course excellent prospects as deep if not shallow oil fields, considering the high percentage of domes which have in the past proved productive. In addition there are over 100 prospects indicated to have important oil or gas producing possibilities through geophysical or geological work, many of which may be counted upon to develop into productive fields.

Finally, it is to be recognized that in spite of the great amount of geophysical and geological work that has been done upon the Gulf Coast during the past decade, there are still important possibilities for additional discoveries. While it is not believed by the geophysicists that any great number of shallow salt domes have been overlooked in the work that has been done, they do anticipate that additional prospects in the form of very deep-seated salt domes, folds, or faults, may be revealed in considerable numbers in future work.

It is to be expected, therefore, that the possibilities of finding new domes and

structures will continue to induce geophysical and geological exploration along the Gulf Coast for a considerable period into the future; while the newly awakened concern over reserves is already causing increased drilling activity in the region, as pointed out previously, the field work being directed both to further exploitation of established fields and to the testing of virgin prospects.

Landward Margin of Plain

The attention which is now centering on the Texas - Louisiana coastal country has been generating in a large way since about 1928. At that time geological prospects in the salt dome region began developing into good oil fields in large numbers, and discovery of oil at Refugio in 1928 threw the spotlight upon the Texas Gulf Coast trans-salt dome region, while the finding of oil at Pettus early in 1930 opened up further possibilities, stimulating interest in a shore-line trend southwestward into the Laredo-Mirando district near the Rio Grande, and northeastward through Raccoon Bend into Louisiana—a trend hundreds of miles long, paralleling the coast line and representing the landward margin of the Gulf Coastal Plain. From all sections of Texas, and even from Oklahoma and other states of the Mid-Continent, operators began to move into South Texas, among them being numerous companies which had never been interested in the region before.

The stage appeared to be set for a major development campaign along the Texas coast. In the latter part of 1930, however, all plans of the oil industry were suddenly changed by the discovery of the unprecedented East Texas field. That area suddenly dominated the whole industry, and the big play which had seemed imminent for the coastal country did not materialize.

Finally, however, the East Texas obsession began to recede. The industry at length has realized that the East Texas field, despite its awe-inspiring magnitude and productivity, is after all only one limited oil deposit, and that others must be found. With the return of interest in other areas it was but natural for attention to shift back in large measure to the Texas-Louisiana coastal country, and thus the stage has been re-set for the major development campaign which was so rudely interrupted at the close of 1930.

The return of interest to the coastal country has been under way, in fact, for a considerable part of 1932, stimulated in the meantime by important discoveries of productive areas and by manifestation of high faith in the possibilities of the region in the form of lease trades at impressive figures by leading companies.

As early as March 1932, the exceptional potentialities of the salt dome fields was brought forcefully to the attention of the industry by consummation of a deal whereby one of the largest and most successful companies in Texas agreed to pay a total of $20,000,000 for a one-half interest in a lease block covering one salt dome field, the productive area of which is estimated to be around 2500 acres. That field was Rabb Ridge, Fort Bend County, Texas. A few weeks earlier the same company had contracted to pay $4,000,000 for the discovery well and surrounding lease block of about 4500 acres in the new Conroe field, Montgomery County, which is along the previously mentioned trend running from the Mirando district through Pettus, Raccoon Bend, Conroe, and into Louisiana. That whole trend, incidentally, is now under intensive exploration, and already two additional producing areas have been opened in the recent development: the Spurger area, Tyler County, where a wildcat came in as a gas well, and the district eight miles south of Livingston, Polk, County, which also recently furnished a wildcat gas producer.

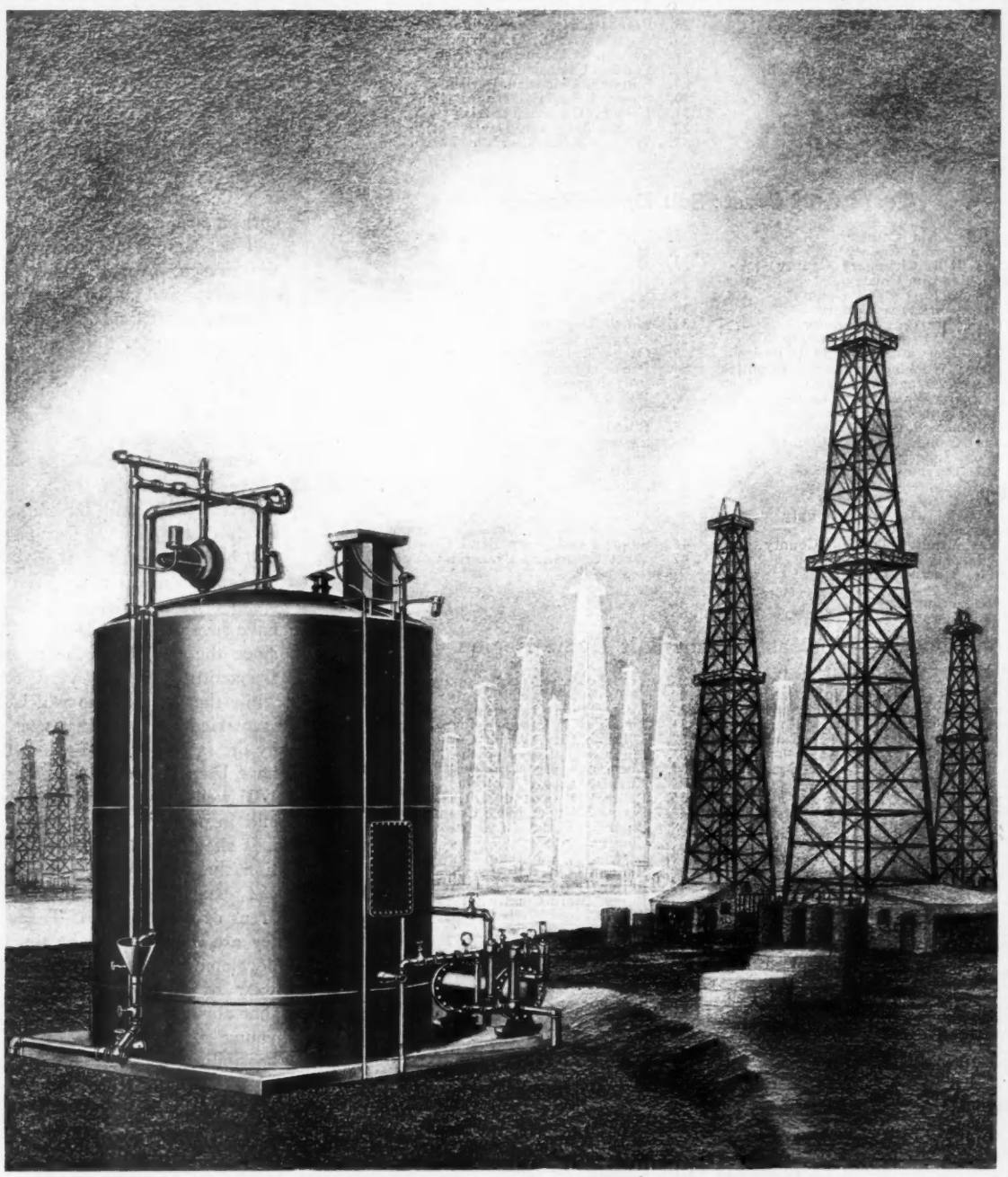
Since the beginning of 1932 the southwestern portion of the Gulf Coast region has also furnished great encouragement and attracted much favorable attention through the opening of a half dozen new producing areas. While some of them have yielded only gas as yet, it has been the history of numerous gas fields in that district, beginning with Refugio, to develop ultimately into oil producing areas as well.

The above review furnishes proof that

Lake Development Always a Coastal Problem

Silhouette of a well in an interesting Gulf Coast oil field. The picture was taken at twilight on the waters of Sweet Lake, Cameron Parish, Louisiana.

PETECO



THE ELECTRICAL PROCESS OF DEHYDRATING CRUDE OIL EMULSIONS
(Fully Covered by Process and Apparatus Patents)

NO SINGLE FACTOR IN PETROLEUM PRODUCTION
IS MORE ESSENTIAL TO ECONOMICAL OPERATION

PETROLEUM RECTIFYING CO. OF CALIFORNIA. 530 W. Sixth St., Los Angeles, Calif.
Branch: 412 Petroleum Bldg., Houston, Texas

Oil and Gas Fields of the Texas-Louisiana Coastal Plain

Louisiana Gulf Coast

1. Anse La Butte, St. Martin Parish
2. Bay St. Elaine (gas), Terrebonne Parish.
3. Bayou Blue, Iberville Parish
4. Bayou Bouillon, St. Martin Parish
5. Black Bayou, Cameron Parish
6. Caillou Island, Terrebonne Parish
7. Cameron Meadows, Cameron Parish
8. Choctaw, Iberville Parish
9. *Darrow, Ascension Parish
10. Dog Lake, Terrebonne Parish
11. Edgerly, Calcasieu Parish
12. East Hackberry, Cameron Parish
13. Fausse Pointe, Iberia Parish
14. *Gueydan, Vermilion Parish
15. Hackberry, Cameron Parish
16. Houma (gas), Terrebonne Parish
17. Iowa, Calcasieu-Jefferson Davis Parishes.
18. Jennings, Acadia Parish
19. Lake Barre, Terrebonne Parish
20. Lake Pelto, Terrebonne Parish
21. Lake Washington, Plaquemines Parish
22. Leesville, LaFourche Parish
23. Lockport, Calcasieu Parish
24. New Iberia, Iberia Parish
25. Pine Prairie, Evangeline Parish
26. Port Barre, St. Landry Parish
27. Sorrento, Ascension Parish
28. Starks, Calcasieu Parish
29. Sulphur, Calcasieu Parish
30. Sweet Lake, Cameron Parish
31. Vinton, Calcasieu Parish
32. Welsh, Jefferson Davis Parish
33. White Castle, Iberville Parish

*First production in 1932.

Texas Gulf Coast: Salt Dome Region

1. Allen, Brazoria County
2. *Ariola, Hardin County
3. Barbers Hill, Chambers County
4. Batson, Hardin County
5. Big Creek, Fort Bend County
6. Big Hill, Jefferson County
7. Big Hill, Matagorda County
8. Blue Ridge, Fort Bend County
9. Boling, Wharton-Fort Bend Counties
10. Brenham, Washington-Austin Counties
11. *Buckeye, Matagorda County
12. Clay Creek, Washington County
13. Conroe, Montgomery County
14. *Coyle-Concord (gas) Colorado County
15. Damon Mound, Brazoria County
16. Esperson, Liberty County
17. Fannett, Jefferson County
18. Goose Creek, Harris County
19. Hankamer, Liberty County
20. High Island, Galveston County
21. Hockley, Harris County
22. Hoskins Mound, Brazoria County
23. Hull, Liberty County
24. Humble, Harris County
25. Lost Lake, Chambers County
26. Manvel, Brazoria County
27. Markham, Matagorda County
28. Moss Bluff, Liberty-Chambers Counties
29. Mykawa, Harris County
30. Nash, Fort Bend County
31. North Dayton, Liberty County
32. Orange, Orange County
33. Orchard, Fort Bend County
34. Pierce Junction, Harris County
35. Port Neches, Orange County
36. Rabb Ridge, Fort Bend County
37. Raccoon Bend, Austin-Waller Counties
38. Rockland, Jasper County
39. Saratoga, Hardin County
40. Sour Lake, Hardin County
41. South Liberty, Liberty County
42. Spindle Top, Jefferson County
43. *Spurger (gas), Tyler County
44. Sunshine, Polk County
45. Stratton Ridge, Brazoria County
46. Sugar Land, Fort Bend County
47. West Columbia, Brazoria County

*First production in 1932.

Texas Gulf Coast: Trans-Salt Dome Region

1. Agua Dulce, Nueces County
2. Albercas, Webb County
3. Alworth, Zapata-Jim Hogg Counties
4. Aransas (gas), San Patricio County
5. Armagosa (gas), Jim Wells County
6. Aviator, Webb County
7. Cabeza Creek (gas), Goliad County
8. Calliham, McMullen County
9. Carolina-Texas, Webb County
10. Charco-Redondo, Zapata County
11. Cole, Duval-Webb Counties
12. Crowther, McMullen County
13. Cuellar, Zapata County
14. Driscoll, Duval County
15. Edna (gas), Jackson County
16. *Edroy (gas), San Patricio County
17. Escobas, Zapata County
18. Goliad (gas), Goliad County
19. Government Wells, Duval County
20. *Gulf-O'Connor (gas), Refugio County
21. Henne-Winch-Fariss, Jim Hogg County
22. Hords Creek (gas), Goliad County
23. Jennings (gas), Zapata County
24. *Keeran, Victoria County
25. *King (gas), Nueces County
26. Kingsville, Kleberg County
27. Kohler, Duval County
28. Leaseholders, Webb County
29. Los Olmos, Starr County
30. Lucas, Live Oak County
31. Marianna, Victoria-Refugio Counties
32. Mirando City, Webb County
33. Mirando Valley, Zapata County
34. Normanna, Bee County
35. Nursery (gas), Victoria County
36. Palangana (salt dome), Duval County
37. Pettus District, Bee County
38. Piedras Pintas (salt dome), Duval County.
39. Randado, Jim Hogg County
40. Refugio-Fox, Refugio County
41. Reiser (gas), Webb County
42. Roma, Starr County
43. Sandia, Jim Wells County
44. Saxet, Nueces County
45. Slick, Goliad-DeWitt Counties
46. S.R.C. Duval County
47. *Stratton (gas), Nueces County
48. *Tuleta, Bee County
49. Three Rivers, Live Oak County
50. West Cole, Webb County
51. White Point, San Patricia County
52. Worth, Live Oak County

Proven Salt Domes, no Oil or Gas Production Yet Established (As of November 1, 1932.)

Louisiana Gulf Coast

1. Avery Island, Iberia Parish
2. Bayou des Glaise, Iberville Parish
3. Belle Isle, St. Mary Parish
4. Calcasieu Lake, Cameron Parish
5. Chacahoula, La Fourche Parish
6. Cote Blanche, St. Mary Parish
7. East Bay Junop, Terrebonne Parish
8. Four Isle, Terrebonne Parish
9. Garden Island Bay, Plaquemines Parish
10. †Jefferson Island, Iberia Parish
11. Napoleonville, Assumption Parish
12. Section 28, St. Martin Parish
13. Venice, Plaquemines Parish
14. Vermilion Bay, Iberia Parish
15. Weeks Island, Iberia Parish

Texas Gulf Coast

1. †Bryan Heights, Brazoria County
2. Clemens, Brazoria County
3. Danbury, Brazoria County
4. Davis Hill, Liberty County
5. Hawkinsville, Matagorda County
6. †Long Point, Fort Bend County
7. San Felipe, Austin-Waller Counties
8. Gyp Hill, Brooks County

†Sulphur production.

an exploration campaign of large proportions is already under way in the Texas-Louisiana coastal country. The discovery of the dozen new producing areas within 1932 has constituted, in fact, a virtual monopoly on new discoveries for the year in the whole country.

Campaign Gaining Momentum

Not only is the big campaign under way, it may be added, but it is gaining momentum, as might be expected in view of the successes which have come in rapid succession.

It is to be expected, furthermore, that the development which is in progress will be one of relatively long duration. It may be anticipated, to be sure, that the current ardor in searching for new fields will be dampened eventually as some of the present prospects fail to meet expectations and as new prospects become increasingly scarce. But the region which is discussed is far-flung and contains many promising prospects which have never been tested by the drill, and those numerous prospective fields are sufficient to keep the operators interested for a long time.

And when they tire of or prove or disprove the value of the virgin areas, the operators will still have ahead of them much development. For years of work will be required after the locations of the oil deposits are found. Even some of the smaller of the fields of the region will have several hundreds of wells ultimately, since the nature of the producing sands frequently requires very close-spacing; while the extremes to which development is carried in some instances is indicated by the fact that six of the salt dome fields have been drilled to the extent of 1000 to 1700 wells each, with limited development still in progress.

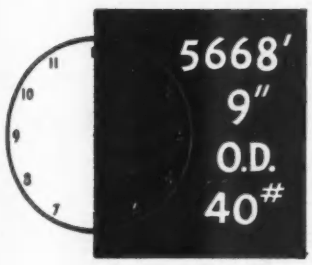
It should be pointed out in this connection that a very high percentage of the 132 established oil and gas producing areas of the Louisiana-Texas coast country are, indeed, only at the threshold of development, as might be expected in view of the previously mentioned fact that about three-fourths of them are very young fields (considering the long-life possibilities of the coastal fields), having been found during the past decade, and a high proportion of those "new" fields, in fact, having been ushered in within only the past several years, so that very limited drilling has yet been done. Any new fields yet to be added to the productive areas will of course likewise have their entire development ahead.

The proportions which that field development work may eventually assume will be accentuated, furthermore, by the vast possibilities for discovering new, deeper producing horizons as time passes. The coastal country offers almost limitless possibilities in connection with deep drilling, since it is one of two regions in the

(*Continued on page* 66)

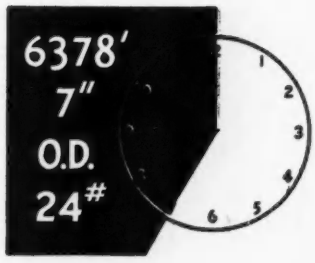
YOU MAKE FAST TIME
SETTING
J&L SEAMLESS STEEL CASING

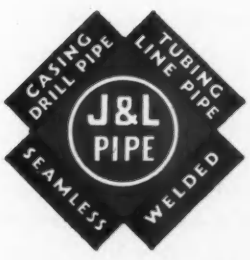
HERE'S AN EXAMPLE



In the Oklahoma City field, Jones & Laughlin 9" O.D., 40# Seamless Steel Casing was set at 5668 feet in six hours. The crew did not lay out a joint. The job was completed quickly and the performance of the pipe was entirely satisfactory.

In the same well, J&L 7" O.D., 24# Grade "D" Seamless was set at 6378 feet in the fast time of five hours. The actual running time was three hours and a quarter, the balance being consumed in mudding in the string. Again, the crew did not lay out a joint.





The satisfaction experienced in this installation (Ray Vaughn No. 1 Well of the Mid-Texas Petroleum Company) is indicative of the performance of J&L Seamless Steel Casing. Only through exceptional accuracy and uniformity of product is such trouble-free speed possible.

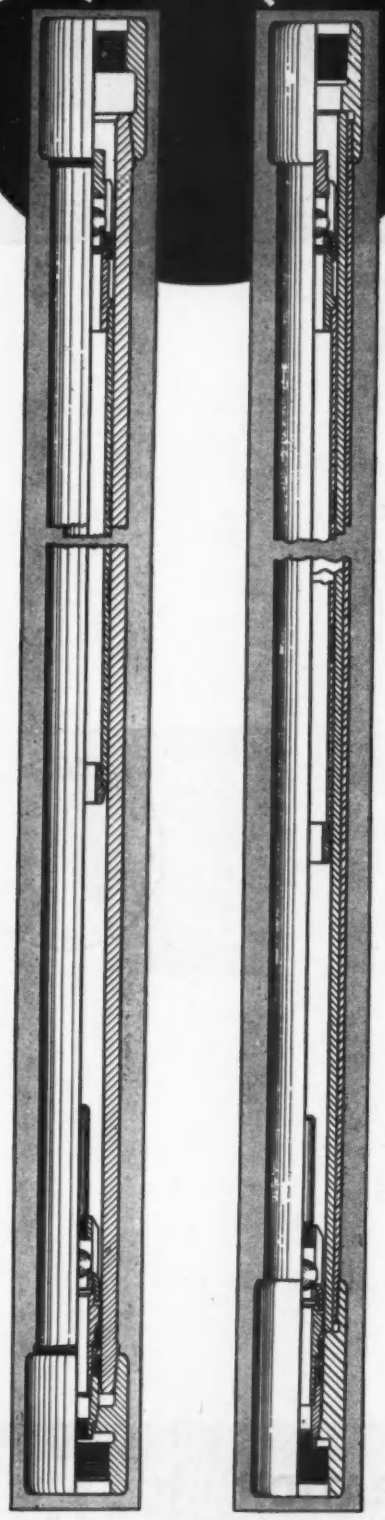
JONES & LAUGHLIN STEEL CORPORATION

J&L STEEL

"OILWELL" IMPERIAL PLUNGER PUMPS

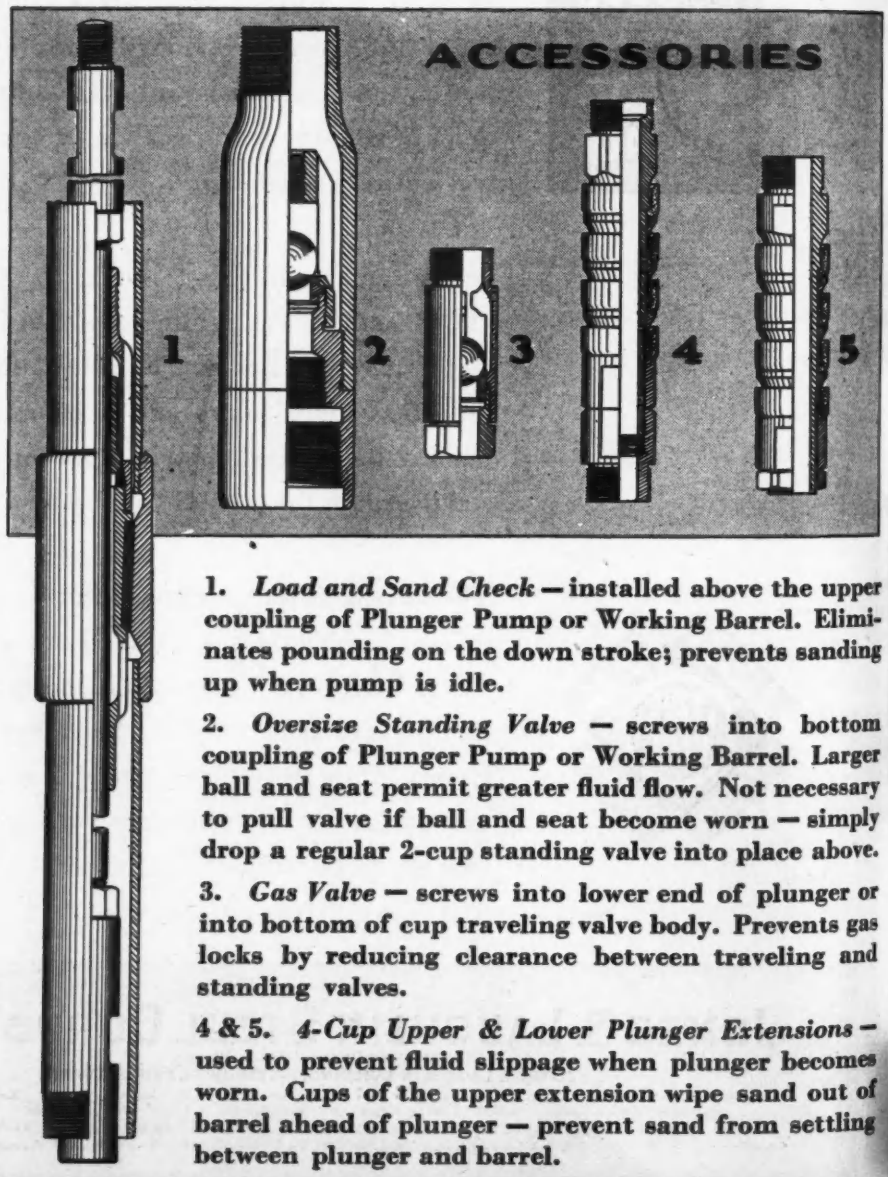
100% A.P.I.

LOWER



CAST IRON TYPE
Standard Equipped

MACHINED LINER TYPE
Standard Equipped



1. ***Load and Sand Check*** — **installed above the upper coupling of Plunger Pump or Working Barrel. Eliminates pounding on the down stroke; prevents sanding up when pump is idle.**

2. ***Oversize Standing Valve*** — **screws into bottom coupling of Plunger Pump or Working Barrel. Larger ball and seat permit greater fluid flow. Not necessary to pull valve if ball and seat become worn — simply drop a regular 2-cup standing valve into place above.**

3. ***Gas Valve*** — **screws into lower end of plunger or into bottom of cup traveling valve body. Prevents gas locks by reducing clearance between traveling and standing valves.**

4 & 5. ***4-Cup Upper & Lower Plunger Extensions*** — **used to prevent fluid slippage when plunger becomes worn. Cups of the upper extension wipe sand out of barrel ahead of plunger — prevent sand from settling between plunger and barrel.**

IMPROVED DESIGNS
..PRECISION-MADE
..BETTER MATERIALS
EXCLUSIVE FEATURES

PRICES

NEW "OILWELL" IMPERIAL A. P. I. PLUNGER PUMPS are made in two types:

Cast Iron Type **— cast and annealed nickel-alloy iron barrel;**

Machined Liner Type **— nickel-alloy iron liner encased in cold-drawn steel jacket. Perfect alignment of long liner sections assured.**

Each type has straight bore with honed mirror-like finish, accurately ground and polished corrugated plunger, precision-made parts.

IMPROVED "OILWELL" A. P. I. WORKING BARRELS are made in two types:

Cast Iron Type **— cast and annealed nickel-alloy iron barrel; bore is straight with highly honed finish.**

Cold-Drawn Steel Type **— special cold-drawn steel barrel.**

Parts are precision-made.

CAST IRON BARRELS for "OILWELL" Plunger Pumps and Working Barrels furnished with regular or reinforced ends. Reinforced barrels made in lengths up to and including 10-feet.

A COMPLETE LINE OF ACCESSORIES is manufactured by "OILWELL". Various combinations for use with plunger pumps and working barrels to suit individual well conditions. Five of the most commonly used accessories shown on the opposite page.

Descriptive Bulletin No. 109 On Application.

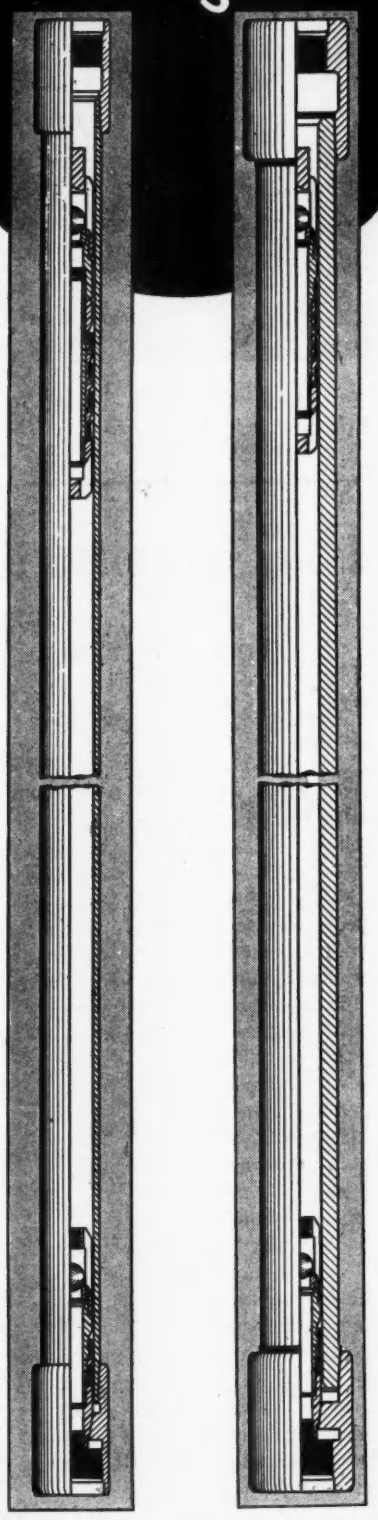
OIL WELL SUPPLY CO.

Branch Stores in all Oil Fields

SUBSIDIARY OF UNITED US STATES STEEL CORPORATION

2058

"OILWELL" WORKING BARRELS



STEEL

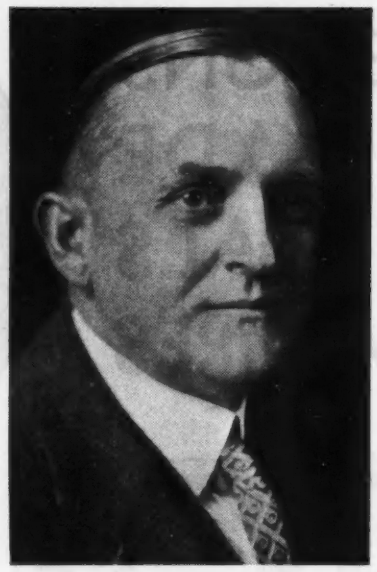
Shown Equipped With New Improved 4-Cup Unit Type A. P. I. Traveling Valve

CAST IRON

Shown Equipped With 4-Cup Regular A. P. I. Traveling Valve

"OILWELL"

AMOS L. BEATY
President of the American Petroleum Institute



W. R. BOYD, JR.
Executive Vice-President of The American Petroleum Institute

CARY A. YOUNG
Secretary, Division of Production, American Petroleum Institute

A. P. I. Accomplishes *Widespread Results from* Mass Leadership

JUST what is the A. P. I.? How does it function?

These are questions not infrequently heard from those who have been in the oil industry but who, for some reason or other, have not been thrown intimately in contact with doings of that organization.

The American Petroleum Institute has functioned rather successfully for the past several years upon the theory, evidently, that mass leadership through co-operation of individuals within the industry will result in real progress.

Over the years, the institute has enrolled services of the oil men in the industry, with the result that it has active about 335 boards, committees, and subcommittees on which are serving around 2500 oil men.

The answer to the question: "Is the institute doing any constructive work?" probably can be outlined best by giving a resume of the function of the various divisions of the institute.

Three boards head the organization: the board of directors, the executive committee chosen by the directors, and the board of councillors which is composed of 400 members taken from all branches of the industry.

There are committees, for instance, on all phases of the transportation branch of the industry dealing with all problems likely to confront that branch in the constructive manner of remedial suggestions for those problems. The same holds true for the drilling branch and the producing branch, and for the manufacturing and marketing branches.

In order to do this, technical papers bearing on stipulated subjects are read at meetings in strategic points throughout the country. Round table discussion of these papers is encouraged. This generates subjects for more papers, and leads to dissemination of information on all technical problems having to do with the industry, regardless of the branch thereof involved. Manufacturers are called into the meetings with the idea that better understanding of the oil industry's needs in the way of equipment will ultimately lower production costs of crude and refined products through manufacture of better equipment therefor.

There are committees on expansion for the use of petroleum products, on fundamental research, on legal matters with which the oil industry is confronted or is likely to be confronted. And findings of all these committees are placed at disposal of members of the institute.

In short, the American Petroleum Institute may be said to be an organization conducted by oil men, for the benefit of oil men in furtherance of their private businesses, and an organization in which to concentrate and center action for or against any developments which concern their welfare.

Work of the division of production has taken up such matters as accident prevention, corrosion, waste disposal, the publication of "The Function of Natural Gas in the Production of Oil," drilling and production practices, metallurgy of oil field equipment, prime movers, production records and nomenclature, well spacing, fire protection and prevention, standardized procedure for measuring, sampling and testing crude oil, unit operation, well spacing, standardization of oil field equipment (dealing specifically with belting, boilers, cable tools, rigs and derricks, tubular goods, rig irons, rotary drilling equipment, wire and manila rope, pumping engines and equipment, steel tanks for storage, correlating gages and gaging practice).

With similar thoroughness the various committees of the American Petroleum Institute have gone into refining and marketing branches of the industry, though problems of the latter have not been of such technical nature but have rather involved more matters of policy.

EXECUTIVES NOT TO BE BOTHERED BY ALLRED

Attorney General Jas. V. Allred will not attempt to subpoena or otherwise interfere with any members of the American Petroleum Institute during the time they are in Texas as the guest of the State at the A. P. I. meeting to be held in Houston.

He extended his greetings to the members who are coming to Texas, and told the OIL WEEKLY representative in Austin that he would be glad of an opportunity to visit with any of the membership who might visit Austin during their stay in Texas.

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

SIR JOHN CADMAN
Anglo-Persian Oil Company, Ltd., London

Guest Speaker
General Session, Wednesday, 2:00 P. M.
Ball Room

DIVISION OF PRODUCTION

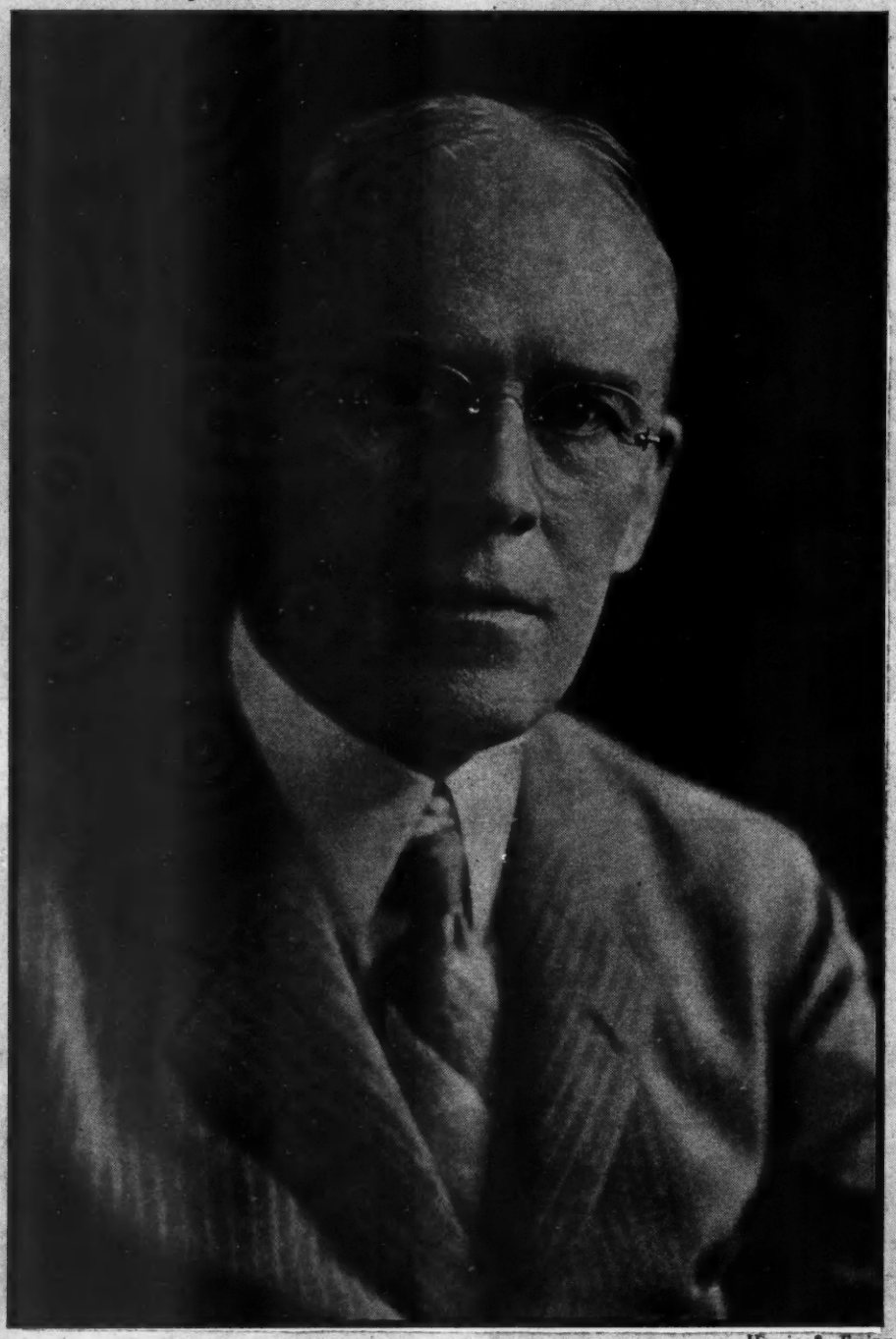
ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

PETER MOLYNEAUX
The Texas Weekly

Guest Speaker
THE SOCIAL STAKE IN THE OIL INDUSTRY
General Session, Wednesday, 2:00 P. M.
Ball Room

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE



—Harris & Ewing

HENRY I. HARRIMAN
Chamber of Commerce of the United States

Guest Speaker
General Session, Wednesday, 2:00 P. M.
Ball Room

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

ALBERT J. McINTOSH
Standard Oil Company of New York
Economic Forecast: (For the Institute's Committee on Refinery Statistics). Tuesday, 2:00 P.M., Ball Room

JOHN W. FREY
Bureau of Foreign and Domestic Commerce
Economic Forecast: (For Federal Oil Conservation Board). Tuesday, 2:00 P.M., Ball Room

J. J. ZORICHAK
Midwest Refining Company
Address: Effect of Additional Wells on Ultimate Yield, Tuesday, 8:00 P.M., Private Dining Room C

H. D. WILDE, JR.
Humble Oil & Refining Company
Address: Hydrodynamics of Reservoir Drainage and its Relation to Well Spacing, Wednesday, 9:30 A.M., Banquet Room No. 1

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

T. V. MOORE
Humble Oil & Refining Company
Address: Hydrodynamics of Reservoir Drainage and its Relation to Well Spacing, Wednesday, 9:30 A. M., Banquet Room No. 1

DONALD R. KNOWLTON
Phillips Petroleum Company
Address: Well Spacing in the Oklahoma City Field, Wednesday, 9:30 A. M., Banquet Room No. 1

CHARLES F. ROESER
Chairman Division of Production
Presides over session on "Production Problems," Wednesday, 8:00 P.M., Ball Room

H. N. MARSH
General Petroleum Corporation of California
Presides over Drilling and Production Practice Session, Thursday, 9:30 A.M., Ball Room

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

J. R. McWILLIAMS
Shelly Oil Company
Address: Importance of Free-Gas Control in Maximum Oil Recovery, Thursday, 9:30 A.M., Ball Room

E. G. GAYLORD
Standard Oil Company of California
Address: Kettleman Development and Production Problems, Thursday, 9:30 A.M., Ball Room

JOHN A. RITTER
Sun Oil Company
Address: Pressure Maintenance in East Texas, Thursday, 9:30 A.M., Ball Room

W. W. SCOTT
Humble Oil & Refining Company
Presides over Drilling and Production Practice Session, Thursday, 2:00 P.M., Ball Room

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

JOHN T. HAYWARD
Barnsdall Oil Company
Address: Tapered Tubing, Thursday, 2:00 P.M., Ball Room

BOWMAN THOMAS
Humble Oil & Refining Company
Address: Selection and Rating of Pumping Units, Thursday, 2:00 P.M., Ball Room

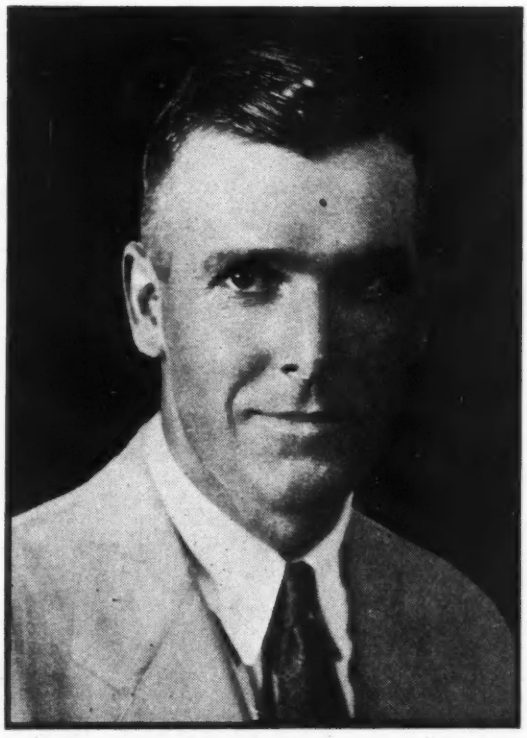
BRUCE BARKIS
Rio Grande Oil Company
Address: Sub-surface Economics in Drilling Practice, Thursday, 2:00 P.M., Ball Room

DIVISION OF PRODUCTION

ANNUAL MEETING, HOUSTON, NOVEMBER 15-17, 1932
AMERICAN PETROLEUM INSTITUTE

RALPH D. COPLEY
Standard Oil Company of California
Address: Sub-surface Economics in Drilling Practice, Thursday, 2:00 P.M., Ball Room

KENNETH A. COVELL
Pure Oil Company
Address: Recent Developments in Drilling Technique and Practice, Thursday, 2:00 P.M., Ball Room



E. V. FORAN
Consulting Engineer
Address: Deep Well Completion Practice in Reagan County, Texas, Thursday, 2:00 P.M., Ball Room

MARKETS ~ STATISTICS

Look to Legislature to Keep East Texas from Demoralizing Market; Kansas Runs Down; California Gasoline Market Better.

Oklahoma, Kansas, Texas Contribute Output Increase

CRUDE oil production of the United States reacted during the week ended November 12 to gains of from 3000 to 7000 barrels in Oklahoma, California, and Texas, to show a net increase of 20,270 barrels above the daily average of the previous week. The average daily output of the United States for the week just ended was 2,107,835 barrels.

Oklahoma as usual was influenced most conspicuously by Oklahoma City and the Seminole district, a gain of about 10,000 barrels occurring in the former, which yielded an average of 97,040 barrels daily for the week; while Seminole dropped slightly over 7000 barrels to 117,750 barrels, offsetting the Oklahoma City rise sufficiently to cause the state to show a gain of only about 3000 barrels, in producing at an average rate of 397,155 barrels daily.

The 6675-barrel increase in Texas production above the 840,000-barrel daily average of the previous week was accounted for almost bodily by the East Texas field. That large producing area yielded 348,500 barrels daily for the week ended November 12, as compared with 341,500 barrels the previous week. The rise in output there was due to the fact that additional wells are being completed regularly, while there has not been any reduction in the per well allowable since October 15, when it was set at 40 barrels daily.

Whereas it had been the practice of the railroad commission of Texas to make semi-monthly reductions in per-well quotas in order to compensate for the completion of new wells, the allowable was left unchanged on November 1. For on October 24 a federal court had declared the commission's East Texas proration orders invalid, and the commission decided not to change the allowable on November 1, but to await developments in the special called session of the Texas legislature, convened by the governor of the state for considering enactment of new conservation statutes. As the past week came toward a close, it appeared that such a new law would not only be passed but probably made effective immediately through gaining a two thirds majority approval of the two legislative houses.

In California production rose 7000 barrels to a new daily average of 472,000 barrels for the week of November 12. The only individual field change of importance was a 4000-barrel increase registered by Kettleman Hills in producing at the daily rate of 62,000 barrels.

Above Allowable Production Threatens California Price

CALIFORNIA production has been running far above the 440,000-barrel allowable, and major purchasing companies hint that they can not guarantee the present price structure in the future if the state output continues to show such excesses. The open flow test at Santa Fe Springs was a weak excuse for the overage for a short time, but it was far from a legitimate cause.

Postponement of the open flow test at Huntington Beach was expected. It followed the postponement at Long Beach, and means that the large number of idle wells will not be reconditioned for the test. The umpire announced that the funds were not available for these two tests.

Two or three companies that have been purchasing most of the surplus oil for years have indicated that they are tired of the burden, and hint that many contracts will not be renewed. Purchases have been reduced some, but the reductions have worked to the advantage of small refiners who market gasoline at reduced prices.

Storage facilities are still fairly well taxed, and stock reduction has not kept pace with plans drawn the first of the year. Both light and heavy oil stocks are too high, and at least two companies would like to liquidate their excesses at somewhere near their book value.

A reduction in crude prices will be justified, if production fails to respond to curtailment requirements. It is known that the dominant companies will not hesitate to reduce crude prices where no attempt is made to meet allotments.

The gasoline market has shown encouraging signs of strength, and it is regrettable that the improvement has not spread to the producing branch. Retail gasoline sales have been holding up well, and consumption is equalling estimates. There has been no tendency toward a price war, and several of the largest price cutters have welcomed the recent gasoline price advances that brought the third grade quotations up to the highest prices in several months.

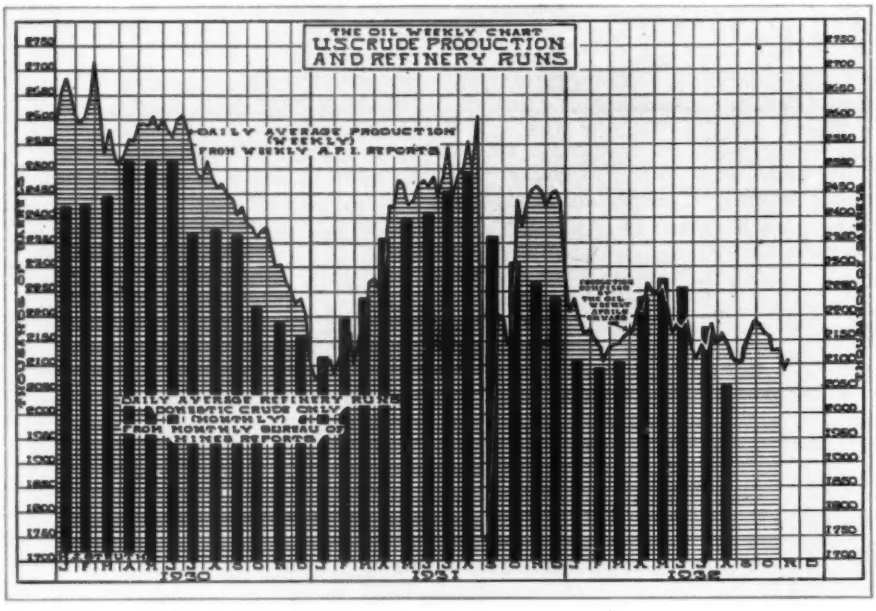
THE OIL WEEKLY

Estimated Average Daily Production in Barrels

District	For Week Ending Nov. 12	Nov. 5
TEXAS—		
Texas Panhandle	44,275	44,150
North and West Central Texas	72,350	72,650
West Texas	154,100	154,100
East Central Texas	48,500	49,600
East Texas Field	348,500	341,500
South Texas	55,800	54,250
Total Texas outside Gulf Coast	723,525	716,250
Texas Gulf Coast	123,150	123,750
Total Texas	846,675	840,000
OKLAHOMA—		
Oklahoma City	97,040	86,975
Seminole District	117,750	124,840
Other Oklahoma	182,365	182,285
Total Oklahoma	397,155	394,100
KANSAS—		
Ritz-Decker	15,500	14,465
Voshell	6,010	6,665
Other Kansas	74,095	74,035
Total Kansas	95,605	95,165
LOUISIANA—		
North Louisiana	28,675	28,250
Louisiana Gulf Coast	35,200	35,000
Total Louisiana	63,875	63,250
ARKANSAS	33,475	33,450
CALIFORNIA—		
Long Beach	68,500	68,000
Santa Fe Springs	58,000	58,000
Midway-Sunset	49,000	47,000
Kettleman Hills	62,000	58,000
Other California	234,500	234,000
Total California	472,000	465,000
MOUNTAIN STATES—		
Wyoming	34,350	34,000
Montana	6,550	6,400
Colorado	2,900	2,700
New Mexico	31,850	31,900
Total Rocky Mountain States	75,650	75,000
EASTERN STATES	102,350	98,900
MICHIGAN	21,050	22,700
Total United States	2,107,835	2,087,565

Distress Material Weakens Mid-Continent Market

FALLING from the slack condition which existed one week ago, the Mid-Continent market, so far as motor fuels and natural gasolines are concerned, has weakened under the influence of gradual-



ly increasing amounts of distress material until prices have been beaten down an average of a quarter to a half-cent a gallon. Some marketers believe that pre-election inactivity is in part responsible for the trend but those who have accurate information on the amount of cheap material moving from Texas refineries into markets of the north Mid-Continent feel that this alone should be credited with the stagnation. Some cheap material is being offered by small Oklahoma refiners and by jobbers who purchased before prices took an upward trend but these amounts are said to be of no consequence. In addition to lack of consumer demand refiners are faced with what might be termed a jobbers strike due to the East Texas situation. In general there seemed to be a feeling of confidence that the Texas legislature will enact a new law or so revise the present conservation act that the railroad commission may deal with economic waste as is permitted under the Oklahoma Conservation Act of 1915. Upon this body apparently rests the immediate future of the oil business. East Texas, thrown wide open or even partially open, would so demoralize the market that the wonderful progress that has been made would be wiped out immediately.

Reports state that refiners are continuing a strict curtailment of runs to stills in a majority of Mid-Continent plants. Continuance of this restriction unquestionably will materially hasten recovery of the industry and refiners will find their inventories approaching reasonable figures at a time when demand is in a seasonal slack. Too much can not be said on the subject of curtailment of runs to stills. Refined stocks continue to be greatly above a reasonable point and further progress of the industry must depend largely upon the refiners and marketers.

Low octane motor fuels led the slump which was reflected into the higher grades but to a lesser degree, principally because of colder weather. Naturals followed the general trend but apparently were gaining some strength at the end of the week. Burning oils continued at about the same prices with demand fairly strong due to scarcity of several of the grades. In a few instances prices had gained additional strength. The general picture seems to be that present conditions will continue until something definite is reported from the Texas legislature. With the industry assured of a reasonable control of the East Texas field there is no reason why the market should not regain its strength of the previous week within a short time.

Mid-Continent prices, based on Group 3, excluding the one-cent federal tax, appeared to be as follows at the week end but with marketers expecting changes momentarily:

Refinery gasolines—Low octane motor fuels 4 to 4¼ cents; middle octane, 4¼ to 4⅜ cents; above 65 octane, 4⅜ to 4⅝ cents; 60-62, 400 e.p., 4⅛ to 4⅜ cents; 64-66, 390 e.p., 4⅜ to 4⅝ cents; 68-70, 360 e.p., 4¾ to 5 cents.

Natural gasolines—Eleven to 12 pound, high octane, 4¾ to 5 cents; 15 to 18 pound vapor, 3¾ to 4 cents; 18-22 pound vapor, 3½ to 3¾ cents; 22 to 24 pound vapor, 3 to 3¼ cents; and 24 to 26 pound vapor, 2¾ to 3 cents. Prices on the 11 to 12 pound grade had remained unchanged from those of the previous week.

Net withdrawals from Oklahoma and Kansas storage for the week ending November 1 were approximately 22,300 barrels daily, having dropped from a point above 30,000 barrels daily for the week preceding.

Kansas Fields Run Less Oil Than Allowable in October

Wichita, Kansas.—Current reports from the office of Lloyd R. Pickrell, state proration umpire, show that 49 central western Kansas wells had a combined daily potential of 49,291 barrels as of November 1. Total pipe line runs for the period October 1 to November 1 were 74,632 barrels compared with 76,073 barrels total allotments, leaving a current net shortage of 1441 barrels. Of the total potential, 11,375 barrels are credited to wells which have never had potential gauges and are estimated on short production periods. Practically all of these are located in areas which have been shut in since completion due to lack of outlet. Status of the area as of November 1 is shown in the accompanying tabulation.

Kansas Production, November 1, 1932

Pool or District	No. of Wells	Potentials	Total Allotments	Pipe Line Runs	Basis of Proration
Davidson	1	Est. 75	None	None	*
Isern	2	1,073	2,028	2,085	5% of Pot.
Scheufler	1	Est. 700	None	None	*
Breford	1	Est. 800	None	None	*
Heiken	2	2,382	None	None	**
Stoltenberg	6	5,326	None	None	**
Stratmann (23-16-10w)	1	50	718	718	100% of Pot.
Stratmann (1-17-10w)	10	16,607	50,075	48,528	10% of Pot.
Beyer	2	300	4,361	4,361	100% of Pot.
Orth	1	Est. 1,800	None	None	*
Ploog	1	1,000	None	None	S.I. since 10-1-32
Schurr-Raymond	12	11,988	18,891	18,940	5% of Pot.
Sharpe	3	2,090	None	None	S.I. since 8-20-32
Steckel	1	Est. 150	None	None	*
Greenawalt	1	50	None	None	
Richardson	4	4.900	None	None	**
Total	49	49,291	76,073	74,632	

*Shut in since completion. **Shut in since May 23, 1932, when Stanolind Crude Oil Purchasing Company disconnected.

Crude Runs to Stills, Motor Fuel Stocks, Gas, and Fuel Oil Stocks and Cracked Gasoline Production, Week Ended November 5, 1932

(Figures in barrels of 42 gallons each)

DISTRICT	Daily Refining Capacity of Plants			Crude Runs to Stills		MOTOR FUEL STOCKS					Gas and Fuel Oil Stocks	Daily Charging Capacity of Cracking Units			Cracked Production Daily Average
	Potential Rate	Reporting Total	Reporting %	Daily Average	% Operated	(a) At Refineries	(b) Bulk Terminals	(b) In Transit	(c) Other M.F. Stocks	Total Motor Fuel		Potential Rate	Reporting Total	Reporting %	
East Coast	644,700	638,700	99.1	452,000	70.8	3,588,000	7,109,000	912,000	321,000	11,930,000	9,331,000	344,400	326,400	94.8	88,000
Appalachian	144,700	137,500	95.0	93,000	67.6	1,011,000	377,000	53,000	216,000	1,657,000	766,000	59,100	57,600	97.5	25,000
Ind., Ill., Ky	434,900	424,000	97.5	282,000	66.4	2,906,000	2,894,000	96,000	175,000	6,071,000	4,069,000	341,400	328,200	96.1	85,000
Okla., Kans., Mo	459,300	405,800	88.4	178,000	43.9	3,098,000	766,000	.....	865,000	4,729,000	3,149,000	257,400	238,100	92.5	49,000
Inland Texas	315,300	219,700	69.7	77,000	35.0	1,053,000	31,000	.....	207,000	1,291,000	2,084,000	117,300	95,100	81.1	24,000
Texas Gulf	555,000	545,000	98.2	347,000	63.7	5,041,000	194,000	.....	214,000	5,449,000	9,559,000	506,500	495,500	97.8	85,000
Louisiana Gulf	146,000	142,000	97.3	71,000	50.0	1,181,000	136,000	.....	33,000	1,350,000	3,738,000	74,400	74,400	100.0	21,000
North La.,—Ark	89,300	84,500	94.6	44,000	52.1	148,000	29,000	.....	54,000	231,000	474,000	29,500	25,500	86.4	10,000
Rocky Mountain	152,000	139,000	91.4	26,000	18.7	1,113,000	.....	.....	15,000	1,128,000	458,000	71,400	68,100	95.4	7,000
California	915,100	866,100	94 6	430,000	49.6	12,434,000	.....	.....	2,700,000	15,134,000	100,720,000	197,700	197,700	100.0	39,000
TOTALS WEEK: November 5, 1932	3,856,300	3,602,300	93.4	2,000,000	55.5	31,573,000	11,536,000	1,061,000	4,800,000	48,970,000	134,348,000	1,999,100	1,906,600	95.4	433,000
October 29, 1932	3,856,300	3,609,800	93.6	2,040,000	56.5	31,376,000	11,856,000	1,385,000	4,860,000	49,477,000	133,904,000	1,999,100	1,906,600	95.4	438,000

Below are set out estimates of Crude Runs to Stills and Motor Fuel Stocks on B. of M. Basis for Week Nov. 5, 1932 compared with certain Nov. 1931 Bureau figures.

Estimate B. of M. basis Week Nov. 5, 1932	2,075,000	(d)	32,170,000	13,100,000	4,800,000	50,070,000		455,000
U. S. B. of M. November 1931 Figures:—		11/1	33,084,000	13,865,000	3,490,000	50,439,000		
November 1931 Daily Average Crude Runs	2,388,000	11/31	35,103,000	13,395,000	3,497,000	51,995,000	November 1931 Daily Average Cracked Prod	501,000

(a)Stocks at refineries, except in California district, which includes stocks of finished gasoline and engine distillate at refineries, at water terminals and at sales distributing stations and any amounts in transit thereto.
(b)By districts, East of California only. In California, bulk terminal and in transit stocks are included under "At Refineries" heading. See note (a).
(c)Estimated. Includes motor fuel in pipe lines and unblended natural gasoline at refineries and plants, also blended M. F. at plants.
(d)Estimated to permit comparison with A. P. I. Economics Report which is on Bureau of Mines basis.

Court Orders Embarass Texas Enforcement Officers

Tyler, Texas.—The number of East Texas independent producers, pipe line companies and refineries enjoying a federal court order restraining the representatives of the commission from inspecting their records continues to increase, thereby making it difficult for enforcement officers to detect illicit operations. Proration officers have been forced to work men in shifts on some properties to prevent flagrant disregard of production restrictions.

Magnolia's November Runs Slightly Decreased

Dallas, Texas.—Crude runs by Magnolia Pipe Line Company from fields in Texass, Oklahoma, Arkansas and Louisiana averaged 101,323 barrels daily during October, or a decrease of 6117 barrels as compared to the previous month. Seasonal reductions in proration allowances in many of the fields served was largely responsible for the decline. The above figures represent crude produced and purchased by Magnolia Petroleum Company. The latter's crude stocks in Oklahoma were reduced 89,471 barrels, or at average rate of 2886 barrels daily in October, leaving 7,702,442 barrels on hand at the close of October. Tanker shipments of crude oil from Beaumont docks by Magnolia Petroleum Company continue at a high rate, and during October reached a seasonal high mark of 885,009 barrels, as compared to shipments aggregating 729,077 barrels in September.

Cheek Test Reported in Oligocene Below 6347 Feet

Houston.—Jack Schultz's O. M. Todd 2, wildcat test of Cheek dome in the William Carr Survey of Jefferson County, was drilling below 6347 feet November 11 with the operators of the impression they were in the Oligocene formation at 6200 feet. The well was recently reported to be running 180 feet higher than Todd 1, located 1800 feet north of the present test and abandoned earlier in the year at 6906 feet after several domal indications.

Comparison of Permits Granted for New Wells

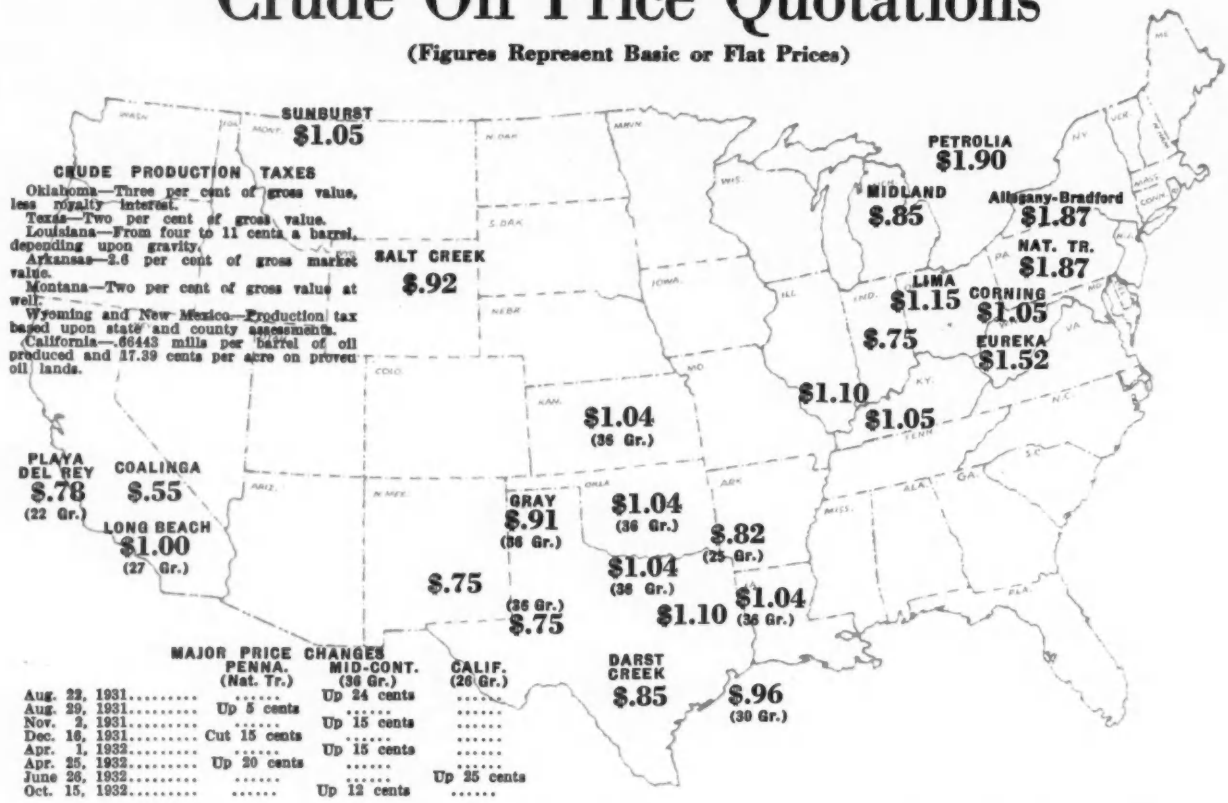
	For week ending Nov. 12	Total this month	Total this year	Total this date last year	1931 year total
Arkansas	1	2	23	31	34
Cailfornia	4	9	309	319	342
Louisiana	15	23	369	277	309
Kansas	20	31	371	390	475
Michigan	6	9	156	90	110
Oklahoma	40	66	844	719	842
Texas	104	309	5,995	5,844	6,981
Totals	190	449	8,067	7,670	9,073

Summarized Review of Week's Field Results

State—	Completions	Oil wells	Gas wells	Failures	Initial prod.
Arkansas	0	0	0	0	0
California	3	1	1	1	12,000
Illinois	1	1	0	0	5
Indiana	0	0	0	0	0
Kansas	20	14	0	6	2,516
Kentucky	7	2	1	4	140
Louisiana	16	8	0	8	3,712
Michigan	7	5	0	2	1,530
Mississippi	0	0	0	0	0
New Mexico	3	2	1	0	20,070
New York	0	0	0	0	0
Ohio	19	6	7	6	46
Oklahoma	40	21	4	15	7,830
Pennsylvania	5	3	0	2	77
Texas	174	129	3	42	752,077
West Virginia	4	1	3	0	40
Miscellaneous	7	1	1	5	25
Totals	306	194	21	91	800,068

Crude Oil Price Quotations

(Figures Represent Basic or Flat Prices)



MAJOR PRICE CHANGES

	PENNA. (Nat. Tr.)	MID-CONT. (36 Gr.)	CALIF. (26 Gr.)
Aug. 22, 1931	.....	Up 24 cents	.....
Aug. 29, 1931	Up 5 cents	.....	.....
Nov. 2, 1931	.....	Up 15 cents	.....
Dec. 16, 1931	Cut 15 cents	.....	.....
Apr. 1, 1932	.....	Up 15 cents	.....
Apr. 25, 1932	Up 20 cents	.....	.....
June 26, 1932	.....	.....	Up 25 cents
Oct. 15, 1932	.....	Up 12 cents	.....

Official Postings and Differentials *(Revised to November 11, 1932)*

CALIFORNIA: (Effective June 26, 1932).

Signal Hill, Seal Beach, Alamitos Heights, Huntington Beach, Olinda-Brea Canon, Torrance, and Richfield: 14 to 19.9 gravity 65 cents; 20-20.9 gravity 69 cents; 21 gravity 74 cents; 22 gravity 79 cents; 23 gravity 84 cents; 24 gravity 89 cents; 25-25.9 gravity 93 cents, top posting for Torrance and Richfield; 26-26.9 gravity 97 cents, top price for Seal Beach, Alamitos Heights and Huntington Beach: 27-27.9 gravity $1.00; 28-28.9 gravity $1.03, the top price for Olinda Brea Canon; 29-29.9 gravity $1.06; and 30-30.9 gravity $1.09, the Signal Hill top posting.

Inglewood: 14 to 19.9 gravity 65 cents; 20-20.9 gravity 71 cents; 21 gravity 77 cents; 22 gravity 82 cents; 23 gravity 87 cents; 24-24.9 gravity 92 cents, the top price.

Playa Del Rey: 14 to 19.9 gravity 65 cents; 20-20.9 gravity 69 cents; 21 gravity 74 cents; 22 gravity 78 cents; 23 gravity 82 cents; 24 gravity 86 cents; 25 gravity 91 cents; 26-26.9 gravity 96 cents, the top price. Field gathering charges of 5 cents a barrel.

Athens, Rosecrans and Dominguez: 24-24.9 gravity 89 cents; 25-25.9 gravity 93 cents; 26 gravity 97 cents; and 27-27.9 gravity $1.00 with three cents additional for each degree gravity upward, ending at 32-32.9 gravity $1.15.

Elwood Terrace: 33-33.9 gravity $1.04 and 6 cents more for each additional degree of gravity, ending with 37-37.9 gravity $1.28, all prices f.o.b. ship.

Whittier and LaHabra: 14 to 19.9 gravity 65 cents; 20-20.9 gravity 68 cents; 21 gravity 72 cents; 22 gravity 77 cents; 23 gravity 83 cents; and 24-24.9 gravity 89 cents, the top price.

Montebello: 14 to 20.9 gravity 65 cents; 21-21.9 gravity 67 cents; 22 gravity 70 cents; 23 gravity 73 cents; 24 gravity 76 cents; 25-25.9 gravity 80 cents, the top price.

Coyote Hills: 14 to 20.9 gravity 65 cents; 21-21.9 gravity 66 cents; 22 gravity 70 cents; 23 gravity 76 cents; 24 gravity 81 cents; 25 gravity 86 cents; 26 gravity 90 cents; 27 gravity 94 cents; 28 gravity 98 cents; 29 gravity $1.02; and 30-30.9 gravity, $1.05, the top price.

Santa Fe Springs: 24-24.9 gravity 73 cents; 25 gravity 79 cents; 26 gravity 84 cents; 27 gravity 89 cents; and 28-28.9 gravity 94 cents, with 4-cent differential for each degree of gravity upward to 35-35.9 gravity $1.22.

Newhall, McKittrick and Kern River: 14 to 19.9 gravity 55 cents.

Midway-Sunset, Elk Hills and Buena Vista: 14 to 19.9 gravity 55 cents; 20-20.9 gravity 59 cents; 21 gravity 63 cents; 22 gravity 69 cents; 23 gravity 75 cents; 24 gravity 81 cents; 25-25.9 gravity 87 cents and 5-cent differential for each additional degree gravity ending with 30-30.9 gravity $1.12.

Lost Hills: Same as Midway-Sunset up through 25-25.9 gravity 87 cents, then 26-26.9 gravity 91 cents; 27 gravity 94 cents; 28 gravity 99 cents; 29 gravity $1.02; and ending 30-30.9 gravity $1.05.

Coalinga: 14 to 19.9 gravity 55 cents; 20-20.9 gravity 59 cents; 21 gravity 62 cents; 22 gravity 65 cents; 23 gravity 68 cents; 24 gravity 72 cents; and ending 25-25.9 gravity 75 cents.

Wheeler Ridge: 14 to 19.9 gravity 55 cents; 20-20.9 gravity 57 cents; and 21-21.9 gravity 60 cents, with 3 cents more for each additional degree of gravity, ending 25-25.9 gravity 72 cents.

Oklahoma, Kansas, North Texas: (Effective October 15, 1932).

Below 28 gravity (Magnolia) 79 cents; below 29 gravity (others) 88 cents with differential of 2 cents for each degree to 40 gravity and above which is posted at $1.12.

North Texas: (Effective October 15, 1932).

Below 28 gravity (Magnolia) 79 cents; below 29 gravity (others) 88 cents, with two-cent differential upward, ending 40 gravity and above, $1.12.

Texas Panhandle: (Effective October 15, 1932).

Gray County: Below 35 gravity: 87 cents, with differential of 2 cents for each degree to 40 gravity and above, 99 cents.

Carson and Hutchinson Counties: Below 35 gravity: 75 cents with differential of 2 cents for each degree to 40 gravity and above which is posted at 87 cents.

West Texas: (Effective October 15, 1932).

Crane-Upton, Crockett, Ector, Howard-Glasscock, Pecos and Winkler Counties, Texas and Lea County, New Mexico: 75 cents.

Southwest Texas: (Effective October 15, 1932).

Refugio Heavy: 80 cents.

Refugio Light: (Same as Gulf Coast—see below).

Gulf Coast: (Effective October 15, 1932).

Goose Creek, Hull, Liberty, Orange, Pierce Junction, Mykawa, Moss Bluff, Raccoon Bend, Barbers Hill, Sour Lake, Spindletop, Sugarland, West Columbia, Humble and Refugio Light: Below 25 gravity: 90 cents, with differential of 1 cent for each degree to 36 gravity which is $1.02 then 2 cent differential to 40 and above which is $1.10.

Mirando: 90 cents; **Salt Flat:** 85 cents; **Darst Creek:** 85 cents; **Pettus:** $1.00; **Markham:** Same as Gulf Coast.

Conroe, Texas: (Effective July 18, 1932).

Two-cent differential applies, beginning 35-35.9 gravity, 90 cents, ending 40 gravity and above, $1.

East Texas: (Effective October 15, 1932).

Flat Price: $1.10.

North Louisiana and Arkansas: (Effective October 15, 1932).

Caddo, Homer, Haynesville, Bull Bayou, Sabine, Cricton, De-Soto, El Dorado, Cotton Valley, Sarepta, Cartersville: Below 25 gravity 80 cents with differential of 2 cents for each degree beginning with 25 gravity and ending with 40 and above. Top price $1.12 a barrel.

Smackover: 75 cents.

Rocky Mountain States: (Effective June 1, 1932).

Salt Creek: Below 29 gravity 76 cents; 29-29.9 gravity 78 cents with differential of 2 cents each degree to 40 and above. Top price $1.00.

Elk Basin and Grass Creek: $1.10; **Big Muddy:** 98 cents; **Lance Creek:** $1.15; **Rock Creek:** 90 cents; **Sunburst:** $1.05; **Osage:** 98 cents; **Cat Creek:** $1.20; **Pondera:** 90 cents; **Hogback, New Mexico:** 80 cents.

Mid-Western States: (Effective April 11, 1932).

Lima: $1.15; **Indiana:** 75 cents; **Illinois:** $1.10; **Princeton:** $1.10; **Wooster:** $1.25; **Western Kentucky:** $1.05.

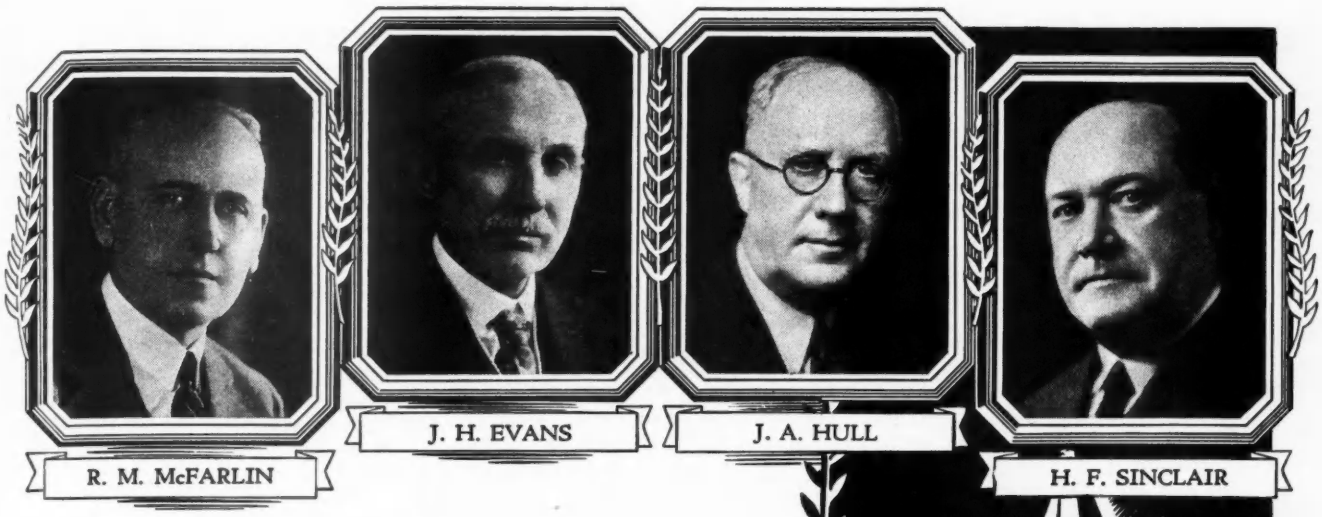
Pennsylvania: (Effective September 13, 1932).

Bradford District: $1.87; **National Transit Oil:** $1.87; **Southwest Pennsylvania Pipe Line Oil:** $1.57; **Eureka Pipe Line Oil:** $1.52; **Buckeye Pipe Line Oil:** $1.37; **Corning Crude:** $1.05.

Michigan: (Effective July 13, 1932), **Midland:** 85 cents a barrel. **Muskegon:** 76 cents to $1.00 a barrel.

Canada: (Effective Nov. 3, 1931).

Petrolia: $1.90; **Oil Springs:** $1.97.



R. M. McFARLIN | J. H. EVANS | J. A. HULL | H. F. SINCLAIR

We Pay Tribute

TO the vision and industry of the founders of the Exchange National Bank of today must be attributed in large measure not only the growth of this institution but of the City of Tulsa, itself.

Three years after statehood, back in 1910, Tulsa was in the grip of depression, of confusion and of doubt. Tulsa stood at the crossroads—growth and prosperity or decay and despair rested in the hands of its leaders.

The founders of the Exchange Bank did not accept defeat. They visioned that Tulsa would become the "Oil Capital of the World." With courage and confidence they organized the bank to serve the oil industry and the community.

Nearly a quarter of a century has passed since these men snatched progress out of defeat, and in that period they have played an important part in the building of a great city and a great bank.

When they made their decision, Tulsa was but an oil field town—rough, and with a few of the finer privileges of life. Today it is the headquarters for many great concerns doing a world-wide business in petroleum and its products, and other diversified interests; a city of culture, stability and opportunity.

These men witnessed the growth of the Exchange National Bank from a few customers and total resources of but $410,000 to a modern banking institution counting thousands of patrons and with more than $38,000,000 of resources.

Other splendid men have given devoted services to this program of progress, but only four remain of the courageous band who first got the vision—R. M. McFarlin, J. H. Evans, J. A. Hull and H. F. Sinclair.

Today when all the State of Oklahoma is celebrating its Silver Anniversary, the Directors, Officers and Employes of the Exchange Bank of Tulsa pay tribute to them and to those other men who joined in founding the "Oil Bank of America."

Founders of The Exchange National Bank—1910

D. F. Connolly, H. F. Sinclair, E. D. Mitchell, R. S. Litchfield, P. J. White, J. H. Evans, F. B. Ufer, J. A. Hull, M. H. Mosier, R. M. McFarlin, Thomas White

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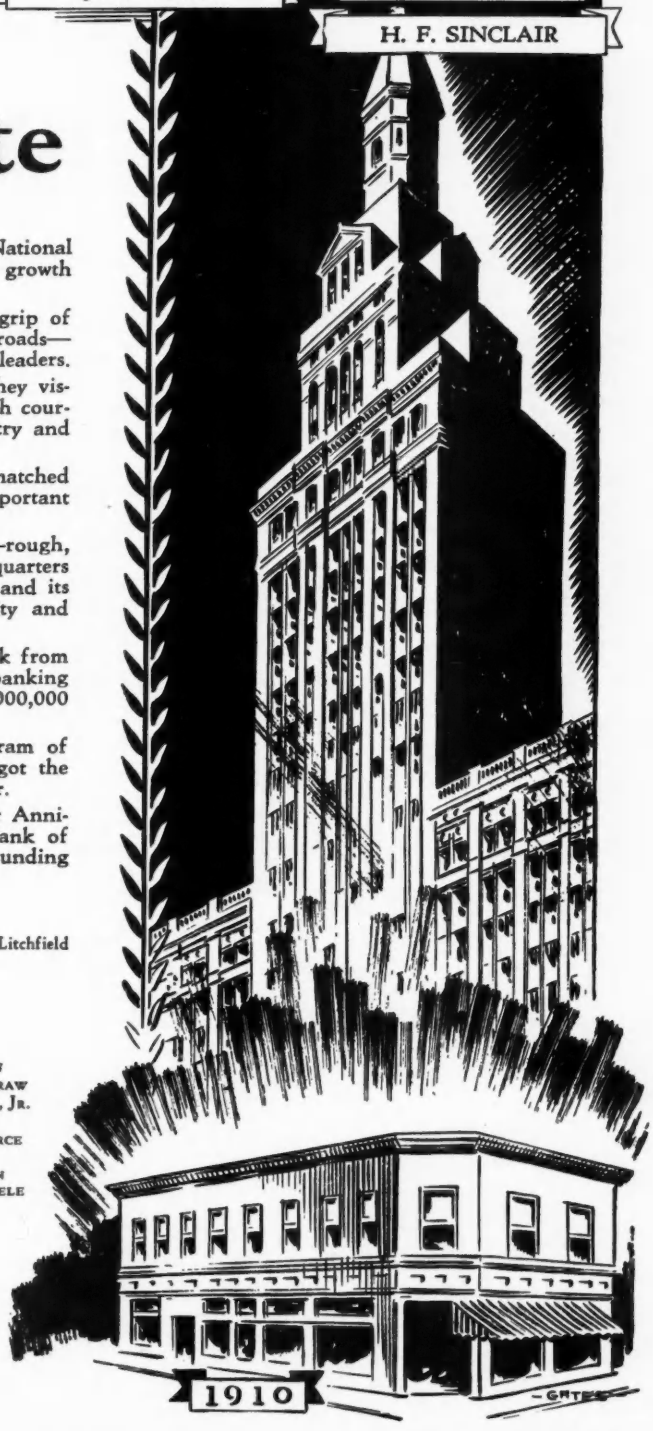

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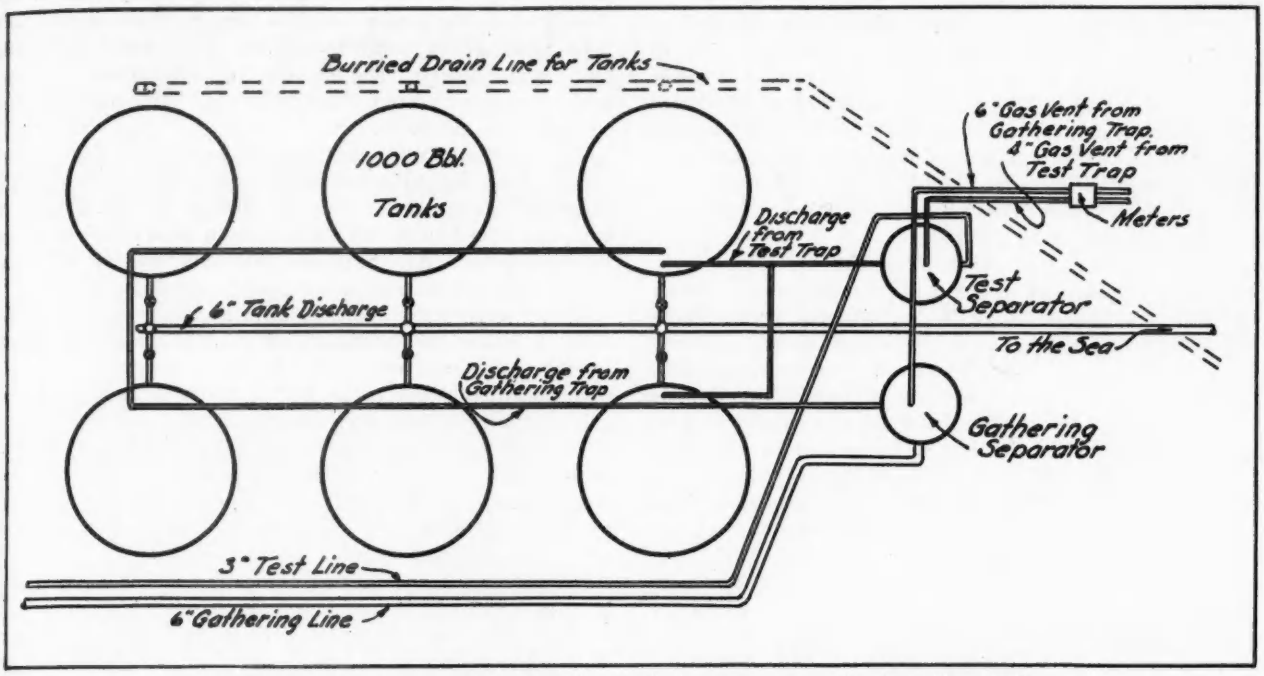


Gathering System at the North End of the Cumarebo Field in Venezuela

Gravity *Facilitates* Handling of Oil In Cumarebo Field

CONSIDERABLE ingenuity is often necessary in arranging an economical and efficient gathering system to fit the terrain in foreign fields. The Cumarebo field in Venezuela, S. A., which was recently discovered and is now being developed by Standard Oil Company of Venezuela, offers an interesting study of means to take advantage of favorable conditions and to overcome the numerous obstacles which arise. An outstanding feature of the field is the effective use of gravity and the elimination of pumping in transporting the oil from the wells in all parts of the field to a gathering station and from there to the sea where it is loaded into tankers.

The Cumarebo field is situated approximately four kilometers south of the coast and lies on a south-to-north slope at a considerable elevation above the sea. Running more or less in the center of the productive area of the structure, and extending throughout its length is a valley or cuebrada. As this valley also slopes sharply to the sea it was decided that a feasible gathering system could be installed by making use of this natural means.

Blowing in from 1200-Foot Sand, This Well Made 1200 Barrels Through Half-Inch Choke.

Only one major obstruction was against this plan and that was a hog-back lying directly across the valley at one point. This rise was 30 feet too high to give the required unbroken slope but it was at first thought that it could be effectively ditched. The plan had to be discarded, however, when the ditch—which would have had to have been approximately 500 feet in length—reached a depth of 18 feet. It was therefore decided to bore a tunnel from that point on to carry the oil through the hog-back.

Hand labor with picks and shovels alone was used to do the tunneling. Such labor is comparatively cheap in Venezuela, however, and the 700 cubic meters of excavation was done at an average of only nine bolivars a meter,

which at the present rate of exchange is $1.38.

To provide for all possible production it was decided to install a six-inch spiral welded line throughout the length of the field to serve as the main gathering line. Alongside of this was also laid a three-inch screwed line which served to carry the oil from individual wells when a production test on said wells is desired. These two lines ran to a battery of tanks which was located at the north end of the producing area and on a direct route to the coast where a main storage tank was erected.

Entrance to these two lines from the individual wells was made by means of a crossover connection as shown in the accompanying drawing. This connection was placed at an angle to the line so that if an additional gathering and testing line was needed for another area it would be possible to break the union and lay corresponding lines in any direction. As can readily be seen, the crossover connection permits the production from a well to enter the test line or to be switched into the main gathering line.

The gathering battery consists of six 1000-barrel high tanks. As the wells produced an appreciable amount of gas, two separators were mounted on a platform that raised them three feet above the level of the tank tops. The platform was built large enough to provide for additional separators as they become needed. A large separator of 10,000-barrel capacity was provided for the collective wells, and a small one of 3000 barrels for testing individual wells. All gas is metered to ascertain gas-oil ratios at this point.

The gathering line and its connections were designed to withstand a pressure of 1500 pounds per square inch. The discharge connections, as may be seen from the accompanying sketch, were placed overhead so that all oil switching can be done from the tank walk. The discharge from the test separator is, at present, connected into two tanks only.

When approximately 10 wells were hooked up, as indicated, it was the usual custom to test each well for three full 24-hour periods every month to determine its actual performance. In some cases wells were tested for a longer period. The production from the other wells was then prorated from the daily test. The majority of the wells were capable of producing from 500 to 2500 barrels a day through small size chokes.

Naylor spiral welded pipe in 40-foot lengths was chosen for its adaptability to hand packing since all pipe lines had to be strung by hand. Under average conditions it took from four to six men to carry a joint to the required point.

In making all sharp bends line pipe and combination nipples were used. The lines were run across trestles in several places to keep them to grade. Junk pipe was used to make the supports.

The arrangement of the lines did away with the necessity of installing individual separators together with the difficulty and expense of their installation. It also made for ease and speed in putting a well on a production test upon its completion. All that was necessary was to flange the Christmas tree to a previously installed flow line.

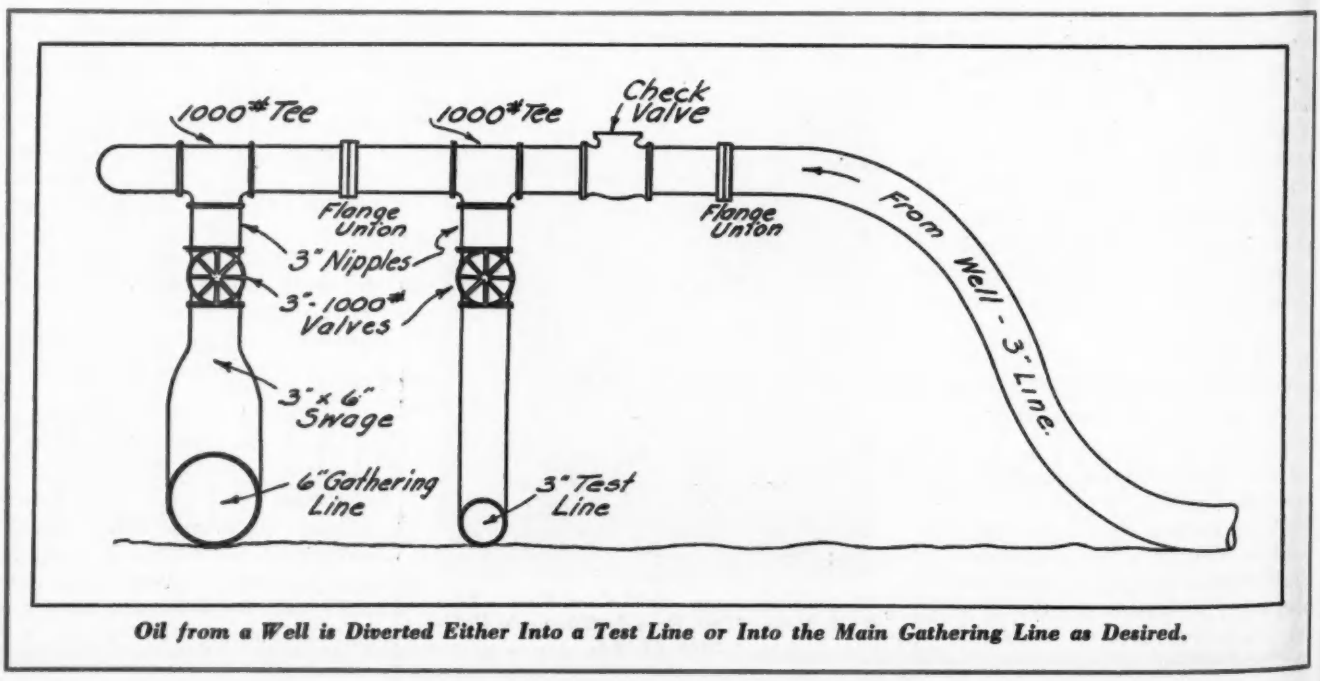
The crossover connections were installed as near as possible at 200-meter intervals and at places where additional lateral gathering lines would be necessary. This planning was easily followed since all the wells were located on a grid system at 100 meter intersections.

The only inconvenience imposed by this method of gathering oil was caused by the necessity of taking samples from the individual wells. This meant that each well had to be visited daily and samples collected to be centrifuged and tested for gravity.

All valves on the lines as well as at the wells had to be kept locked since the natives have a penchant for opening or closing any and every valve they can get their hands on. The lines were watched day and night on account of the medicinal value the natives place on oil. To them it is a panacea for all ills and they soon found out that the thin wall of the pipe could easily be cut through with a machete.

Owing to the rather steep grade of the gathering line very little vibration was experienced. The oil was carried from the gathering tanks to the storage tanks at the beach through another six-inch spiral welded line. This line also had a good natural grade and it required only 35 minutes to empty a gathering tank into an 80,000-barrel tank at the beach through a distance of approximately four kilometers.

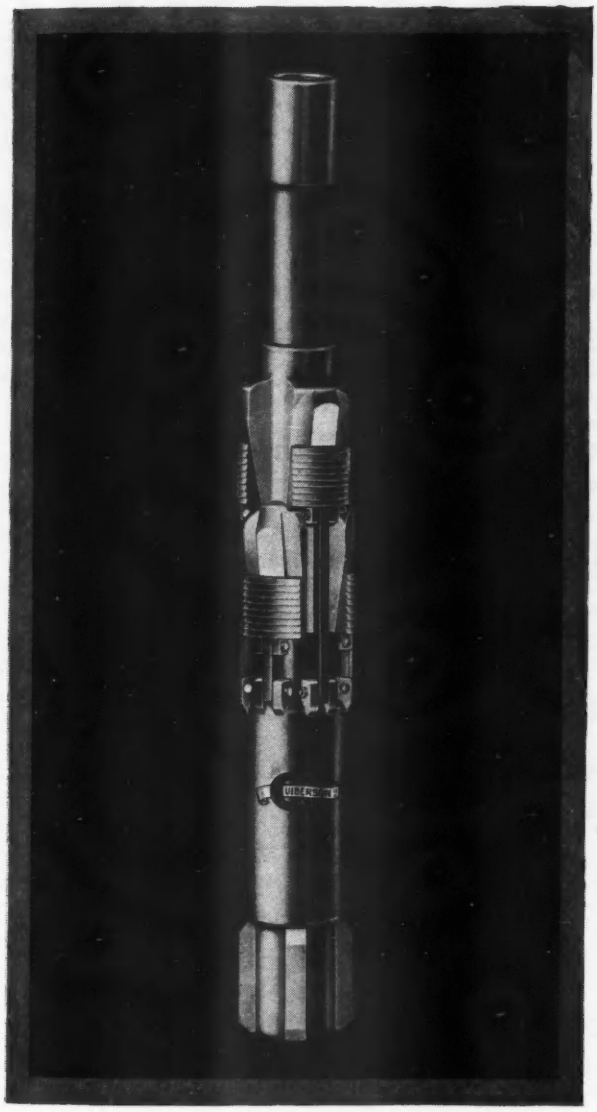
The storage at the beach on the Caribbean Sea consists of one 80,000 and one 20,000-barrel tank. From here the oil is loaded into tankers through a sea line that extends into the water about 3800 feet. This line lies on the bottom and comes to the surface at its extreme seaward point with a riser. Ships are moored to buoys when taking on a cargo of oil which is carried to them from the pipe line through hose.



Oil from a Well is Diverted Either Into a Test Line or Into the Main Gathering Line as Desired.

Riddle:

WHAT HAS SIX SLIPS AND NEVER HAS A SLIP?



Answer:

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Norco, Louisiana
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Gulf Coast *is Outstanding*

Deep Field Country

JACK LOGAN
Staff Representative

THE oil operator who is exploring leases on and around the flanks of the salt domes of the coastal plains of Texas and Louisiana is like an adventurous youth embarking upon a sailor's career, with the ports of all the earth lying ahead. For in drilling in the salt dome region the oil explorer finds the whole world of geology lying beneath his feet.

Spudding a well in sand, clay or silt laid down only yesterday, he has before him all the successively older formations in which oil is found, and he may drill on hopefully to the limits set by his drilling machinery—to 10,000 feet, or perhaps some day to 15,000 feet or more. So long as he can keep drilling there is to be found just a little farther down a formation or a zone which has produced oil somewhere. For the coastal plains constitute one of the two regions in the United States, the other being California, where the thicknesses of the sedimentary formations are so great as to make practically unlimited the possibilities of deep drilling.

It is to be expected, therefore, that the Gulf Coast will always figure prominently in efforts to go deeper and deeper into the earth's crust to find oil; and it is only natural, likewise, that the region is today an outstanding source of deep oil production.

The past several years have been particularly fruitful on the Gulf Coast in establishing deep production. Within less than three years the number of fields with production below 5000 feet has doubled, there having been only 17 such fields at the opening of 1930.

Out of a total of 84 established oil fields along the coastal plains from the Mississippi River westward to and including Refugio, just beyond the regular salt dome country, there are now 34 fields which have yielded oil at depths greater than 5000 feet, the other 50 fields having had only shallower production, although at least 10 of them have had important oil or gas showings below the 5000-foot level. Disregarding those showings, however, and considering only established production, it is seen that over 40 per cent of the coastal fields have already proved productive below 5000 feet. In tabular form, the above facts are as follows:

Texas-Louisiana Gulf Coast

Fields productive below 5000 feet	34
Fields without production below 5000 feet	*50
Total productive fields	84

*Includes 10 which have had showings below 5000 feet.

There is significance in the fact that at least 10 of the 50 shallower fields have already furnished important deep showings. Such showings are steps toward placing the shallower fields into the deeper classification, with only additional time and more thorough exploration needed for developing commercial production in the deeper horizons. Considering the rapid rate at which deep sands have been found during the past several years, in fact, it appears that every coastal field has important possibilities for production below 5000 feet.

THIS first of a series of articles on deep drilling along the Gulf Coast gives general information on the almost unlimited possibilities for deep production which the region affords, and shows what has already been accomplished toward cashing in on these possibilities. Thirty-four fields in which production has been found below 5,000 feet are listed, and the formations from which they produce are indicated in an accompanying table.

The second article of the series will constitute an elaboration upon the first, taking up individually the 34 deep fields and showing the extent and commercial importance of the deep production in each. Similar detailed information will also be given on the various shallower fields and unproductive prospects which they have had important deep showings of oil or gas.

Not only to the proven fields, furthermore, have deep oil showings been limited. At least six oil field prospects, all of them indicated by geophysics to be potential sources of oil, have also furnished important showings below 5000 feet, indicating that they may be deep fields from the beginning.

If areas which had showings below 5000 feet are counted along with those which have deep production already established, the combined total is greater than the number of fields with production or showings only at depths less than 5000 feet. This information is shown perhaps better in tabular form, as follows:

Texas-Louisiana Gulf Coast

Deep Oil Sands—	
Fields with production below 5000 feet	34
Fields with showings below 5000 feet	10
Prospects with showings below 5000 feet	6
Total: fields and prospects with production or showings below 5000 feet	50
Shallower Sands—	
Fields with production and showings only at less than 5000 feet	40

Considering the successes which have attended past, limited efforts to establish deep production, the above table indicates that the coastal plains have not only 34 fields with established production below 5000 feet and 16 others which have given promise of similar deep oil horizons, but in addition 40 other shallower but potentially deep fields which may ultimately boost the total number of deep fields to 90.

Even the latter figure, furthermore, does not by any means represent the full extent of deep production possibilities in the coastal region. For aside from the areas of the various classi-

fications given above, there are two other important groups. In the first place there are 22 additional potential coastal fields in the form of known salt domes which have not as yet produced any oil, either shallow or deep, although having been proven as domes by wells drilled into cap rock or salt. Those domes are readily conceded by coastal operators as potential sources of deep as well as shallower production.

In addition to the 22 domes definitely established as such, there are approximately 100 prospects, not yet established either as oil or gas fields or as known salt domes, but offering promise through geophysics or through surface or subsurface geology that they will prove to be oil or gas fields of the usual salt dome type or else of the related coastal types classified as very deep-seated salt domes or deeply buried folds or faults. Some of those prospects will quite likely prove disappointments, but many will not, and for those which are condemned, the future will no doubt bring compensation through discovery of some other promising prospects. It is no wild dream, consequently, to think of the coastal region as the potential scene of 200 or more deep oil fields.

Considering now in more detail the results already obtained through deep drilling, it is seen by reference to an accompanying tabulation that the 34 fields which have been listed as deep fields, that is with production below 5000 feet, include 19 within the regular salt dome region of the Texas Gulf Coast, six additional Texas coastal fields located somewhat farther southwest, beyond the limits of the main dome country, and nine fields lying within the Louisiana portion of the Gulf Coast.

Naming them in their order of location from the state line westward, the 19 fields of the regular salt dome region of the Texas Gulf Coast which have yielded production below 5000 feet are as follows: Orange, Orange County; Big Hill, Spindletop and Fannett, in Jefferson County; Esperson, Moss Bluff, Hull, and North Dayton, in Liberty County; Barbers Hill, Chambers County; Conroe, Montgomery County; Humble, Goose Creek, and Pierce Junction, Harris County; High Island, Galveston County; Manvel and Allen, Brazoria County; Rabb Ridge, Fort Bend County; and Nash, Fort Bend and Brazoria Counties.

The six fields farther southwest along the Texas coast, past the main salt dome country, are Keeran and Nursery, Victoria County; Marianna, Victoria and Refugio Counties; Gulf-O'Connor and Refugio, Refugio County; and Lucas, Live Oak County.

Along the Louisiana Gulf Coast the nine fields with production below 5000 feet are as follows: Cameron Meadows, Black Bayou, East Hackberry, and Sweet Lake, all in Cameron Parish; Lockport and Sulphur, in Calcasieu Parish; Iowa, in Calcasieu and Jefferson Davis Parishes; Jennings, Acadia Parish; and White Castle, Iberville Parish.

While the 5000-foot level has been used in the above dis-

Deep Producing Areas of Texas and Louisiana Gulf Coast

Fields shown in red are where wells have been completed as oil or gas producers below 5,000 feet. In addition to those established deep fields there are various shallower and unproductive prospects which have had important showings below 5,000 feet.

cussion and in accompanying tables as the dividing line between "deep" and "shallower" production, it may be of interest further to subdivide the 34 fields with productive sands below 5000 feet, and segregating those which have proven productive below 6000 feet and below 7000 feet.

Such segregation reveals the perhaps startling fact that there are 13 fields with known productive horizons below 6000 feet, including six in Texas and six in Louisiana. Those in Texas are Barbers Hill, Buckeye, Refugio, Esperson, Manvel and Nursey, the first three named having the more firmly established production below 6000 feet. The six in Louisiana are Jennings, Sweet Lake, Iowa, Lockport, Black Bayou, and East Hackberry.

Narrowing the deep coastal producing areas down to those which have yielded production from depths greater than 7000 feet, there are still six fields represented, four in Texas and two in Louisiana. Named in the diminishing order of their producing depths, the four in Texas are Buckeye, Esperson, Manvel, and Barbers Hill, and those in Louisiana are Jennings and Sweet Lake.

While there is no established production along the Gulf Coast below 8000 feet, there is one field in the "below-7000-feet" classification which lacks less than 100 feet of falling within the 8000-foot division. It is Buckeye, where the wildcat producer which opened the field was completed as an oil well in sand logged from 7808 to 7926 feet.

TABLE 3

Prospects Which Have Had Showings Below 5000 Feet

Although they are not established definitely as deep producing areas, various prospects have had important oil or gas showings below 5000 feet. Among them are the following:

Texas Gulf Coast

1. Hamshire Prospect, Jefferson County.
2. Cheek Prospect, Jefferson County.
3. Cedar Bayou Prospect, Harris County.
4. Needville Prospect, Fort Bend County.
5. Citrus Grove Prospect, Matagorda County.
6. Sheppards Mott Prospect, Matagorda County.

Although no well has been completed as a producer below 8000 feet, there are three coastal fields which have had important showings at depths below that level. Those fields are Refugio on the Texas coastal plain and Jennings and East Hackberry in Louisiana. At Jennings oil and gas were found, but not in commercial quantity, in two wells, the showings occurring between 8613 and 8698 feet. Those wells were Yount-Lee Oil Company's wells No. 9 and No. 10 on the Houssiere-Latrielle lease. At East Hackberry

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In the Earlsboro, Oklahoma, Field, approximately 85 barrels of fluid was being obtained from a well 4200′ deep. Early in July, 1932, an Axelson 2″ x 5′ TCBE Working Barrel with proper fit plunger was installed. Operating at 24 R P M with 72″ stroke, production jumped to 204 barrels per day. The increased production, resulting from change to Axelson's improved barrel, was the difference between 204 and 85 barrels per day, 50% of it being oil in both cases, or a net oil increase of about 59 barrels per day.

In the Corsicana, Texas, Field, an Axelson 2½″ x 7′ TCBE Working Barrel was installed to replace a competitive barrel in a 3000′ well which had been making 450 barrels per day and experiencing numerous rod breaks, running at 26 R P M. After installation of Axelson Barrel, with proper fit and length plunger, the first day's production was 580 barrels. Seven days later a second check was made and production found to be the same. A third test, made thirty days later, showed no change. In the meantime, it was found advisable to remove 1200 lbs. weight from the counterbalance due to light running of the Axelson Barrel. This well also showed a great reduction in rod breakage. This installation clearly demonstrates that the use of Axelson Barrels with proper fit and length of plunger, increases production and lowers operating costs.

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Approximately 200 wells in the Corsicana-Mexia area have been changed to this identical installation since the above Axelson Barrel was installed.

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In the deep production at Lovell, Oklahoma, a report on three strings of ¾" Axelson Box and Pin Sucker Rods follows:

Well No. 1, 6125′ deep. Rods installed on July 28, 1931. 2" tubing, 50" stroke, 18 R P M, handling 30 bbls. oil and 35 of water per day. Only three breaks occurred up to August 12, 1932.

Well No. 2, 5650′ deep. Rods installed September 7, 1931. 2" tubing, 56" stroke, 18 R P M, handling 25 bbls. of oil and 40 of water per day. Three breaks occurred up to August 12, 1932.

Well No. 3, 6250′ deep. Rods installed September 11, 1931. 2" tubing, 56" stroke, 20 R P M, handling 35 bbls of oil and 30 of water. Up to August 12, 1932, date of our last report, only three breaks had occurred.

In the Voshell, Kansas, Field, Well No. 1 had a string of Axelson rods in it for a period of six months, during which time approximately 13 breaks were experienced. On being replaced by a competitive rod, approximately 13 breaks occurred in the first thirty days of service.

Well No. 2, same operator, a string of Axelson rods were in service for eight months with exact number of breaks not recorded, the last month in use three breaks having occurred. These rods were then replaced with a competitive rod and in the first fifteen days three breaks were experienced.

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For Stamina, Endurance and Resistance to oil well fluids, Axelson Sucker Rods are unexcelled.

Consult the nearest Frick-Reid man who will gladly give complete information and arrange, if desired, to have an Axelson representative assist in the application of equipment best suited to your individual well conditions.

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TULSA, OKLAHOMA

TABLE 1

Gulf Coast Fields With Productive Oil and Gas Sands Below 5000 Feet

Field—	Producing horizon: depth, feet	Identity of pay formation*	Extent of development.
		Texas: Salt Dome Region	
1. Buckeye	7808-7926	Marginulina	Discovery well of new oil field.
2. Esperson	7346-7624	Upper Saline Bayou.....	Gas and high gravity oil in two non-com. wells.
	6990-7067	Jackson	One well tested gas.
	6707-6711	Jackson	One small producer of high gravity oil.
	5707-5752	Jackson	One well yielded little oil but was later deepened
	3950-4124	....	Two oil wells.
	3250-3350	Miocene	Dozen oil wells.
	2275-2390	Miocene	About 15 oil wells.
3. Manvel	7470-7590	McElroy	Non-commercial dry gas in one well.
	5460-5685	Middle Oligocene	Two oil wells.
	3985-4009	Miocene	One oil well.
4. Barbers Hill	7130-7296	Lower Oligocene	One well produced little oil; soon abandoned.
	6320-6690	Frio	Half dozen good oil wells.
	6000-6182	Middle Oligocene	One new oil well.
	4666-5819	Middle Oligocene	About 225 prolific oil wells.
	4124-4520	Middle Oligocene	Over 30 oil wells.
	3750-3800	....	Three oil wells.
	3450-3650	....	Half dozen oil wells.
	800-2200	Cap and Pliocene-Miocene	Small production from considerable number of oil wells.
5. Big Hill, Jefferson....	5900-5958	....	Gas well: 2000 lbs. closed-in pressure.
	1700-1800	....	Several small oil wells.
6. High Island	5022-5911	Miocene	About 15 oil wells.
	4487-4521	Miocene	One oil well.
	3625-3766	Miocene	Two oil wells.
	1500	Cap Rock	Few oil wells.
7. Goose Creek	5875-5894	....	One oil well: soon quit flowing; deepened & abn.
	1000-4600	Oligocene; Miocene-Pliocene	Many good oil wells.
8. Spindle Top	4000-5879	Lower Oligocene; Oligocene	Many prolific oil wells.
	2500-3500	Miocene	Numerous oil wells.
	800-1200	Miocene; cap rock.....	Many prolific oil wells.
9. Moss Bluff	5500-5860	Middle Oligocene	Half dozen oil wells.
	781- 787	Sand above cap rock.....	One small oil producer.
10. Nash	5644-5677	Lower Oligocene	One oil well.
	3700-4700	Miocene	Considerable number oil wells.
11. Humble	1000-5670	Claiborne; Jackson; Oligocene; Miocene; cap rock	Many prolific oil wells; over 50 being more than 5000 feet deep.
12. Fannett	5608-5660	Lower Oligocene	Four oil wells.
	4849-5020	Middle Oligocene	Two oil wells.
	3901-4375	Miocene	Three oil wells.
13. Allen	4346-5584	Miocene	Five oil wells with small production.
14. Pierce Junction	3400-5566	Lower Oligocene; Frio; Middle Oligocene; Miocene	Numerous good oil wells over 5000 feet deep.
15. Hull	1800-5450	Claiborne; Oligocene; Miocene	Several oil wells over 5000 feet deep.
16. Rabb Ridge	4985-5414	Marginulina	About 30 new, prolific oil wells.
	3057-3920	Miocene	Four separate sands; several small oil wells.
17. Orange	2500-5303	Middle Oligocene; Pliocene-Miocene	Several oil wells around 5000 feet deep.
18. Conroe	4981-5233	Cockfield	Over 20 new, good oil wells.
19. North Dayton	4075-5188	Oligocene	Dozen oil wells: 5 over 5000 feet deep.
	400-1100	Miocene; cap rock.....	Numerous small oil wells.

TABLE 1—Continued

Gulf Coast Fields With Productive Oil and Gas Sands Below 5000 Feet

Field—	Producing horizon: depth, feet	Identity of pay formation*	Extent of development.
Texas: Trans-Salt Dome Region			
1. Refugio	9114-9131	.....	Well tested oil with salt water.
	6400-6600	Oligocene	Numerous good oil wells.
	5800-5900	Oligocene	Several good oil wells.
	5400-5600	Oligocene	Numerous fair oil wells.
	3608-3787	Miocene	Many good, low-gravity oil wells.
	1500-3600	Miocene	Many good gas wells.
2. Nursery	6284-6470	Claiborne	Non-commercial gas and oil; one well.
	5750-5842	Cockfield	Non-commercial gas; little oil; same well which tested at 6284-6470 feet.
	800-1000	.....	Small gas wells.
3. Keeran	5841-5851	Oligocene?	One new oil well.
	5182-5189	.....	One well: gas and spray of oil.
4. Marianna	5828-5832	Oligocene?	One non-commercial oil well; deepened.
	4485-4505	.....	Gas well.
	4127-4155	.....	One oil well; small yield; deepened.
	3502-3762	.....	Over half dozen good gas wells.
	2005-2238	.....	Two gas wells.
5. Gulf-O'Connor	5703-5707	Oligocene?	One gas well; recently completed; 10 mi n Refugio field, Refugio Co.
6. Lucas	5270-5277	Cockfield	One oil well; small production.
	2000-2300	Oligocene	Numerous gas wells.
Louisiana: Salt Dome Region			
1. Jennings	8613-8698	Oligocene	Non-commercial oil and gas in two wells.
	7225-7447	Oligocene	Three good oil wells.
	2700-4500	.....	Several small oil producers.
	1500-1900	Miocene-Pliocene	Many prolific oil wells.
2. Sweet Lake	7366-7387	.....	One good oil well.
	6784-6813	Miocene	One good oil well.
	5125-5897	Miocene	Four good oil wells.
	4457-4594	Miocene	Two oil wells.
3. Iowa	6895-6983	Middle Oligocene	Three good oil wells: only tests.
	5001-5008	Miocene	Small oil production in one well; later deepened
4. Lockport	6529-6668	Middle Oligocene	Several oil wells.
	5000-5667	Oligocene-Miocene	Over dozen oil wells.
	4350-5000	Miocene	Some oil wells.
	2900-3400	Miocene	Over half dozen oil wells.
	2200-2400	Miocene	Few oil wells.
5. Black Bayou	6619-6638	Middle Oligocene?	One oil well; recently completed.
	5118-5263	Middle Oligocene	Two oil wells.
	4193-4727	Miocene	Three oil wells.
	965- 981	Miocene	Two small oil wells.
6. East Hackberry	8320-8324	.....	One well had oil showing.
	5990-6003	Middle Oligocene?	Two good oil wells.
	3800-4075	Miocene	About 40 good oil wells.
	2592-3046	Miocene-Pliocene	About 50 good oil wells.
7. White Castle	5700-5836	Miocene	One small oil producer.
	5165-5175	Miocene	One good oil well.
8. Sulphur	5000-5705	Middle Oligocene	About one dozen oil wells.
	2800-5000	Oligocene; Miocene	About 40 good oil wells.
9. Cameron Meadows	5235-5273	Miocene	One good oil well.
	3800-3850	Miocene	One well: gas and little oil.

* For relative positions of various formations see accompanying general Gulf Coast geologic section.

BAROID PATENT UPHELD

Patent for Use of Mud-laden Fluid To Control Oil and Gas Wells Upheld
Product Known as 'Mudcote' Held to Constitute Infringement of Claims; Defenses of Anticipation and Public Use Overruled by Louisiana Federal Court
..There will be positively NO increase in price as a result of this decision
Interested parties can find the complete text of this decision in the Sept. 28, 1932 issue of The United States Daily

U. S. Patent No. 1,575,945, owned by the National Pigments & Chemical Company, St. Louis, Missouri, is for "The Application of Mud-laden Fluids to Oil or Gas Wells."

Claim No. 1 of this patent covers "A mud-laden fluid for oil or gas wells characterized by the fact that it is slimy and has a specific gravity which is substantially in excess of that of clay-laden fluids of the same viscosity."

Claim No. 10 covers "A mud-laden fluid for oil or gas wells comprising Barytes suspended in an earthy suspensoid."

Claim No. 11 covers "In the art of boring or controlling oil or gas wells the process comprising introducing into the well a non-setting mud-laden fluid of a specific gravity which is substantially greater than that of clay-laden fluids of the same viscosity."

On August 22, 1932, this patent was upheld by the Federal District Court for the Western District of Louisiana.

BAROID is the ONLY oil well drilling mud weighting material which is licensed for sale or use under this patent.

Companies contemplating the use of weighting material in drilling muds should investigate their liability before purchasing or using weighting material whose use infringes this patent.

Manufactured by

NATIONAL PIGMENTS & CHEMICAL CO., St. Louis

Exclusive Sales Agents for the United States

BAROID SALES CO., Los Angeles

Stocks Carried in All Oil Fields

Table 2: General Gulf Coast Geologic Section*

Group	System	Series and Formation			Average thickness in feet
Quaternary	Recent				300
	Pleistocene	Beaumont Clay Lissie Sand			1500
Tertiary	Pliocene	Reynosa (Lafayette)			500
	Miocene	Lagarto (Fleming)			3000
		Oakville			
	Oligocene	Catahoula			500
		Middle Oligocene		Discorbis Heterostegina Marginulina	800
		Frio			1000
		Lower Oligocene (Vicksburg)			1500
	Eocene	Jackson		Fayette McElroy Diboll (Caddell)	500 700 300
		Claiborne	Yegua	Cockfield Upper Saline Bayou Lower Saline Bayou	2000
			Cook Mt.	Crockett Milams Sparta	600
			Mt. Selman	Weches Queen City Reklaw Carrizo	1000
		Wilcox—Known only on Clay Creek dome.			
		Midway—Not known on any coastal dome.			
Mesozoic	Cretaceous	Upper Cretaceous	(Fragment of marl of this age found in cap rock at South Liberty.)		
		Lower Cretaceous	(Suggested position of mother salt beds.)		

*After section published in Year Book (1931) of National Oil Scouts Association of America, page 39.

Union Sulphur Company's No. 1 Gulf Land Company Fee tract, Pure Oil Company lease, had a showing of oil at 8320-8324 feet, but mechanical difficulty prevented testing of the deep horizon.

Showing Below 9000 Feet

Details on Refugio are given following those of Jennings and East Hackberry, since the former field has furnished a showing not only below 8000 feet but also at the same time below 9000 feet. The Refugio deep showing was that encountered in Edwin M. Jones' Josephine Mitchell 1-B in the summer of 1932 in sand at 9114-9131 feet. After casing and screen were successfully run and after the string was satisfactorily cemented, the well failed to develop production, although showing some oil along with large salt water flow. That well is distinguished, incidentally, as the deepest test yet drilled along the Texas Gulf Coast. It also rates as the deepest hole ever drilled in Texas.

Most Deep Fields Only Slightly Developed

Several of the fields among the 34 named in the above text and in accompanying tabulations as being productive below 5000 feet have been included only on the strength of one or a few wells completed as oil or gas producers yielding small or large production. Some of those wells have proved commercially profitable, while others have not. It is difficult, however, to draw the line between commercial and non-commercial horizons, particularly with only one or several wells upon which to base an opinion, and so in the accompanying tabulation the deep sands have been given the benefit of the doubt, all fields being included which have had so much as one well actually completed as an oil or gas producer, whether with large or small initial production or ultimate yield.

For it is practically certain that many of the fields with only one or a few deep wells, prolific or non-commercial, will ultimately emerge as important deep fields, only time

(*Continued on page* 64)

Real East Texas Economy

ELECTRIC POWER FOR PUMPING

Foresighted producers in East Texas are settling the power question now for all time. Even East Texas wells must eventually be pumped, and to install electric pumping units now is to forestall emergency.

Emergency makeshift pumping methods are always expensive. Electric power for pumping is real economy in East Texas. And real efficiency. Here, boiled down, are . . .

10 Reasons Why Electric Power Makes Money for Producers in East Texas

1 LOW FIRST COST

It costs only 1/5 to 1/3 as much to equip a well with electric pumping equipment as it costs for other equipment serving the same purpose.

2 LABOR SAVED FOR USE ELSEWHERE

Electric drive reduces labor needed per well, releasing man power for other duties.

3 FEWER ACCIDENTS

Electric drive is safer. Less hazard to men and equipment. Less likelihood of damages to pay.

4 GREATER CONVENIENCE

Electric power goes to work with one push of the button. Clean, easy to handle, always adequate to the job, never any waste.

5 GREATER FLEXIBILITY

Electricity performs every power job on the lease, large or small. Exactly the amount of power needed for any job always there, and under accurate control.

6 LOWER MAINTENANCE

An electric motor has one moving part and two bearings. Almost no maintenance.

7 LESS SHUT-DOWN TIME

Wells pumped by electricity are shut down less frequently than wells using other power.

8 GREATER EFFICIENCY

Electricity is the most efficient known power for pumping wells, and efficiency is necessary to profit in oil today.

9 EASY TO KEEP ACCURATE RECORDS

One bill for electric power makes accurate records easy. Eliminates countless bills for repairs, maintenance, parts, special labor, damages, etc.

10 LOWER PUMPING COST

Total overhead per barrel of oil lifted is always lower when electric power is used.

Electric Power is Available Everywhere in East Texas. Detailed information gladly furnished.

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GAS & ELECTRIC COMPANY
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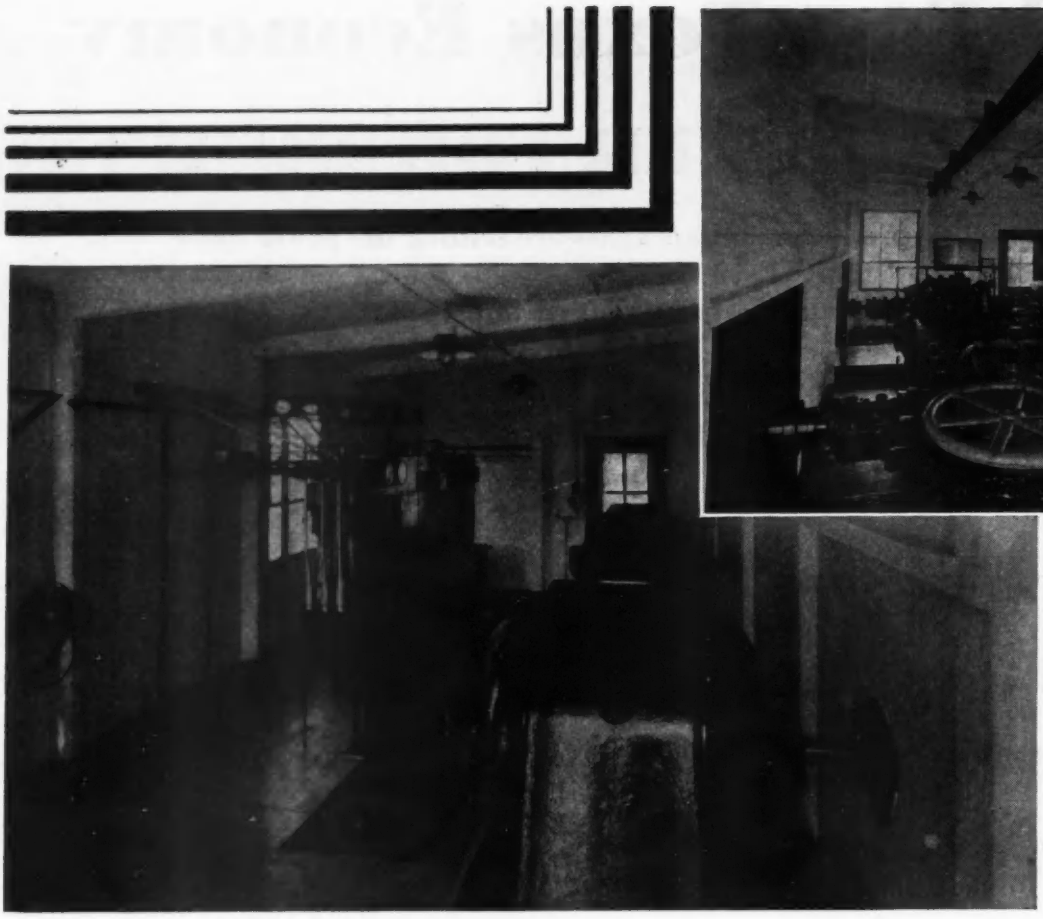

40,000 BARRELS A DAY—
ELECTRICALLY

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FORT WORTH
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EASTLAND
MIDLAND
SWEETWATER
BIG SPRING
EAGLE PASS
WICHITA FALLS

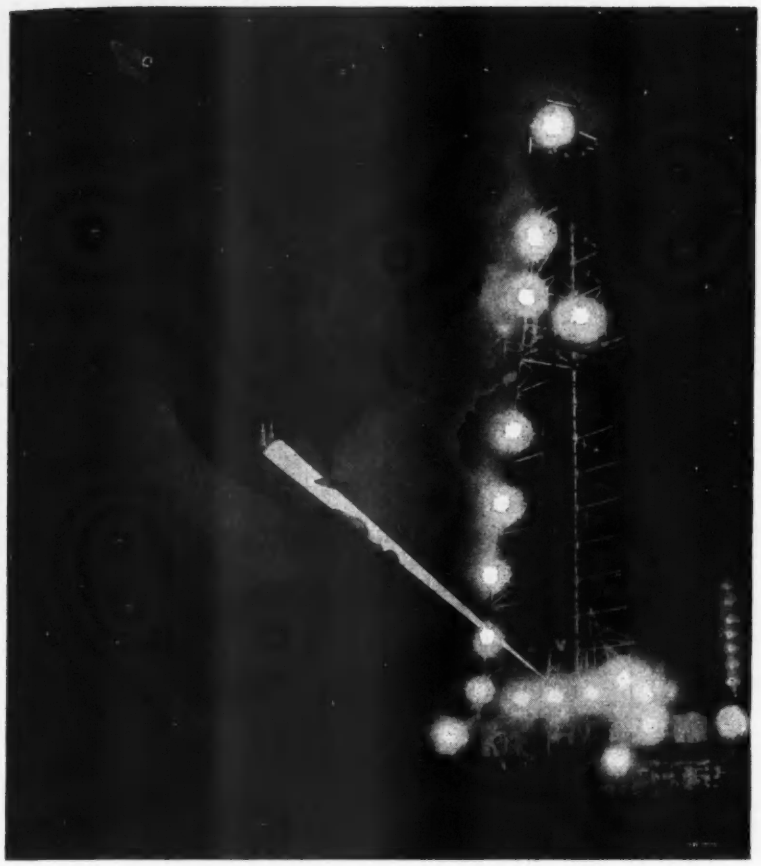
Since November 28, 1928, the above illustrated Atlantic Pipe Line Company's Midland pump station has been operated efficiently and economically by electric power.

The two General Electric 500 H.P., 2200 volt, 1750 r. p. m. electric motors are direct-connected to two five-stage Cameron centrifugal pumps that easily move 40,000 barrels of oil daily when operating at capacity.

Compactness, cleanliness, durability, ease of operation and economy are the principal reasons why this Atlantic Pipe Line Company's Midland pump station has maintained its unusual performance record during the past four years.

Ask for Details of Other Advantages of Electricity in the Transportation of Oil

TEXAS ELECTRIC SERVICE COMPANY



THE A. P. I. BEATS TIME

The progress made by man has been accomplished by conquering time. The struggle will never end. Yet every saving of time reduces the cost of production and releases energy to other effort for man's benefit.

No one appreciates more the work of the A. P. I. than the engineers in the electrical companies serving the great petroleum industry. Together, the notable time-saving accomplishments of leading oil men active in the A. P. I. and of engineers in the utility companies are a rebuke to rule-of-thumb and wasteful methods.

Electrical power makes possible quick moving from lease to lease or field to field . . . quick change from drilling to pumping. It makes for flexibility. It makes for less labor and less depreciation. It saves time, and TIME IS MONEY.

GULF STATES UTILITIES COMPANY

General Offices

BEAUMONT, TEXAS **SHREVEPORT, LA.**

(*Continued from page 60*)

and further drilling being requisite for such development. It may be added, incidentally, that as a matter of fact only a very few of the coastal fields have as yet received anything approaching thorough deep testing. In many of the fields herewith listed as having several wells with production from below 5000 feet, those wells are actually the only tests in the fields which have been drilled past that level. It is only logical to assume in such instances that additional deep tests will very likely furnish additional deep production, and that the fields will ultimately prove commercially profitable.

TABLE 5
Unproductive Salt Domes

Aside from productive fields listed in accompanying tables, there are various additional "potential fields," the known salt domes, established as such by drilling into cap rock or salt.

Texas Gulf Coast

1. Bryan Heights
2. Clemens
3. Danbury
4. Davis Hill
5. Long Point
6. Hawkinsville
7. San Felipe

Louisiana Gulf Coast

1. Avery Island
2. Bayou des Glaise
3. Belle Isle
4. Calcasieu Lake
5. Chacahoula
6. Cote Blanche
7. East Bay Junop
8. Four Isle
9. Garden Island Bay
10. Jefferson Island
11. Napoleonville
12. Section 28
13. Venice
14. Vermilion Bay
15. Weeks Island

TABLE 4
Shallower Gulf Coast Fields

Following are fields which have yielded oil, but not from as great depths as 5000 feet.

Texas Gulf Coast

1. Ariola
2. Batson
3. Big Creek
4. Big Hill (Matagorda County)
5. Blue Ridge
6. Boling
7. Brenham
8. Clay Creek
9. Coyle-Concord (gas)
10. Damon Mound
11. Edna (gas)
12. Hankamer*
13. Hockley
14. Hoskins Mound
15. Lost Lake
16. Markham
17. Mykawa*
18. Orchard*
19. Port Neches*
20. Raccoon Bend
21. Rockland
22. Saratoga
23. Sour Lake
24. South Liberty
25. Stratton Ridge
26. Sugarland
27. West Columbia

Louisiana Gulf Coast

1. Anse La Butte
2. Bay St. Elaine* (gas)
3. Bayou Blue*
4. Bayou Bouillon
5. Caillou Island
6. Choctaw
7. Darrow
8. Dog Lake
9. Edgerly
10. Fausse Point
11. Gueydan*
12. Hackberry*
13. Houma (gas)
14. Lake Barre
15. Lake Pelto
16. Lake Washington*
17. Leesville*
18. New Iberia
19. Pine Prairie
20. Port Barre
21. Sorrento
22. Starks
23. Vinton
24. Welsh

*Oil or gas showings encountered below 5000 feet.

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. . . brings the oil fields to you

. . . ELECTRICITY allows drilling operations to get under way at once. The unwieldy steam boilers, their troublesome water lines and fuel trains — and their fire hazards — are all left behind.

. . . ELECTRICITY provides steady, dependable pumping power where oil is lifted many miles from its underground pools. Electric power re-presses and revives old, abandoned wells, often doubling their total output.

. . . ELECTRICITY welds pipe lines in less time and at less cost than any other method. Electricity stands by at pump stations to hurry the oil to its destination — six or six hundred miles away.

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- they increase production
- they stand up
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and the time to get information about pumping equipment is *before* you need it—not after a well quits flowing.

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Dunigan Tool & Supply Co., Breckenridge, Texas

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JENSEN BROTHERS MANUFACTURING CO.

Coffeyville, Kansas, U. S. A.

Companies Entrenching in Gulf Coast For Future Reserves

(*Continued from page* 30)

United States, the other being California, where sedimentary formations are of such nature and such thickness that the chances for drilling ahead to deeper oil horizons are limited only by the capacities of the drilling equipment.

With respect to the deep exploration, therefore, every field in the region, even to the oldest and to the most highly developed, offers important possibilities. It was, in fact, the original salt dome field, Spindle Top, which first pointed the way in an impressive manner toward the great opportunities for new production at increased depths, having been rejuvenated late in 1925 by discovery of deep sands flanking the salt dome, on top of which most of the field's production had previously been found. From 1901 through 1925, producing from the shallower sands and cap rock, Spindle Top yielded a little less than 49,000,000 barrels of oil. Then came the deep production, and in the six succeeding years, 1926 through 1931, the field added approximately 68,000,000 more barrels to its remarkable production history, the new deep horizons more than doubling the total oil recovery after the field had been given up by many operators as a virtually exhausted source. Even today that same field still has important possibilities for further deep production, for despite having yielded over 100,000,000 barrels of oil, it has as yet had very little production from below 5500 feet, and none from below 6000 feet, although Gulf Coast operations have already demonstrated the practicability of drilling below 9000 feet and the existence of oil bearing sands at similar depths. One field, in fact, Buckeye, in Matagorda County, Texas, is rated as a producing area of major importance on the strength of favorable revelations and performance of a recently completed discovery well yielding oil from sand at 7808-7926 feet. Thus it is seen that the deep production possibilities of the region under discussion are almost without limit, with respect to every field, both new and old.

In conclusion it may be pointed out by way of encouragement to manufacturers of oil field equipment and supplies that the development campaign which is under way in the Texas-Louisiana coastal country promises to afford important markets for their products. For while the formations involved are not hard to drill, with the rotary method always employed, there is an ever-present danger of encountering high pressure sands, making imperative the use of high-quality equipment, while the great depths commonly reached impose further strict demands upon machinery and materials. Even if the East Texas field had not already practically exhausted the second-hand equipment and "junk heaps" of the Mid-Continent, those old and used supplies could hardly have found a place in development of the coastal country with its strict requirements.

East Texas Landowners Buy Buckshot As Legislators Meet

(*Continued from page* 26)

the production figure fixed by the state railroad commission in spite of, and in the face of hell, high water, or all efforts to the contrary, law or no law."

"There are sharpshooters in the field who would take the field for their own selfish greed."

"We don't know what we can do so far as the law is concerned, but we do know that we are not going to see this vast field thrown wide open." Thus spoke Carl Estes, East Texas publisher and a man with quite a following.

"I am not an oil expert, but I think there is an unusual condition which, if we can't check it, will absolutely destroy this oil field,"—Colonel R. T. Jones of Henderson speaking.

"Law or no law," the colonel continued, "the people ought not to lay supinely on their backs and let a judges' decision take from them their right to get out of poverty" (Referring to the recent federal decision voiding the railroad commission's orders).

"If the people of this section let oil get down to five cents a barrel, as it might do if the field is opened wide, they will be a disgrace to the men who were in the Boston tea party and to Patrick Henry who said, 'Give me liberty or give me death'."

Said Judge Edwin Lacy of Longview, "We know there are some pipe lines trying to get oil for a song; that some lines are getting and running oil in violation of proration. Let us bring all pressure possible on the governmental authorities to, by lawful means, remedy this. If that fails, then *perhaps the violators can be visited quietly and sufficient pressure and persuasion applied to make them see the light.*"

Mayor Malcolm Crim of Kilgore, in public, "The big oil men openly tell you they don't give a damn about your friendship. It's oil they want."

Charles F. Roeser of Fort Worth to the landowners: "There are just two things you can do with your oil field; prorate its production so you can obtain a just return, or overproduce and run the price down to 10 cents a barrel and lose your resource."

Perhaps the most widely attended of these meetings has been the one at Tyler October 26. An estimated 1500 were there. The closing paragraph of a body of resolutions passed at the meeting shows determination. It read:

"Be it resolved—That if the worst comes and it develops that we have no laws in this country which will protect the oil property rights of the people of East Texas from selfish and greedy exploitation and consequent speedy destruction, and that we can not get any relief from state or federal governments—that as a last measure of self-preservation this body automatically resolve itself into a vigilance committee and act accordingly."

It is rather intriguing to know that shortly after passage of the above resolution, one hardware merchant in Tyler was reported to have completely sold out of buckshot. Buckshot are not needed for rabbits and birds, which are about the only things hunted in East Texas.

Sales of Buckshot

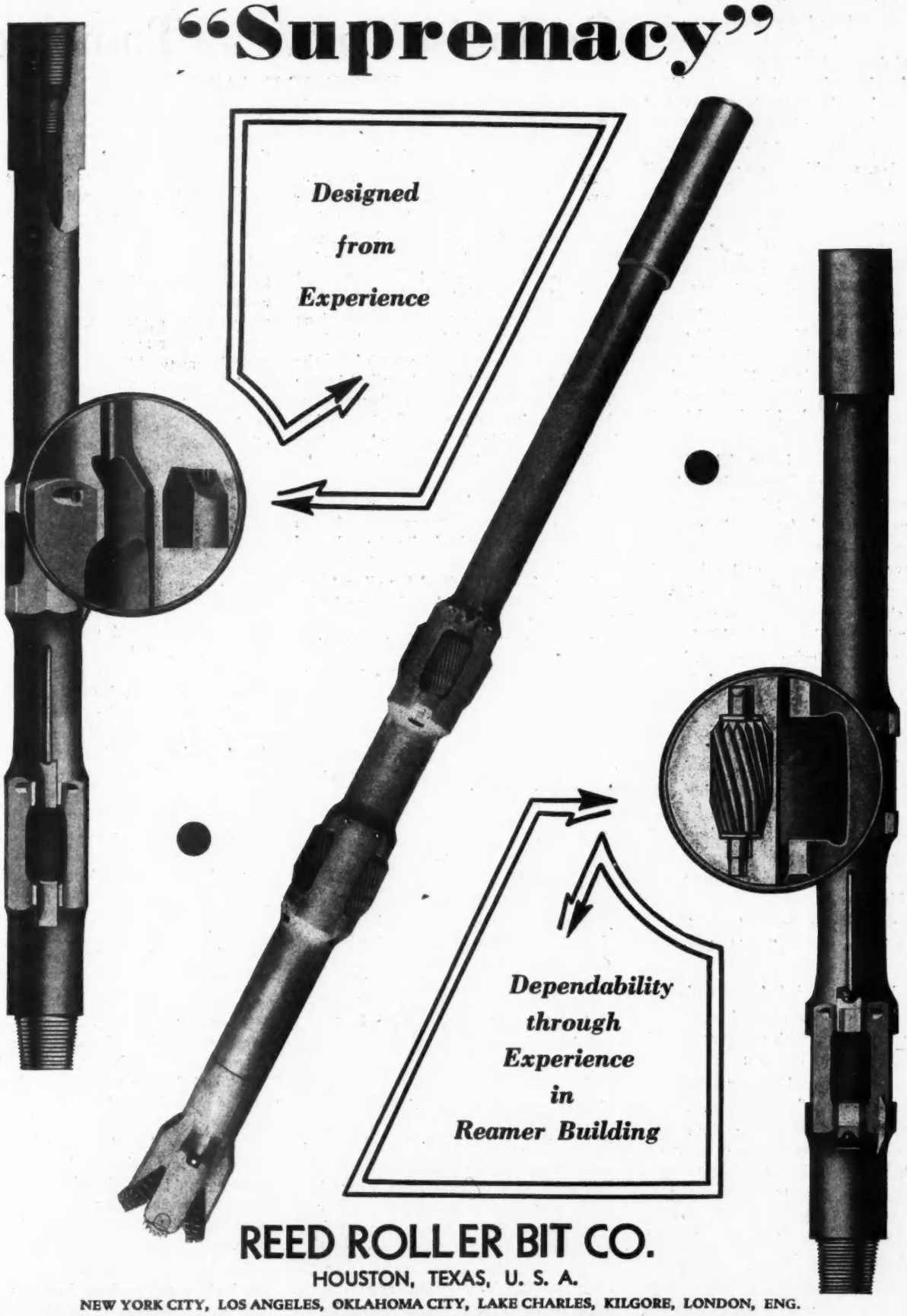
A few days after passage of the resolution the writer discussed with an ammunition salesman in what appeared one of the largest hardware stores in Longview the trend in shell sales.

"For some reason or other," he said, trying to be non-commital and insinuating at the same time, "our sales of ammunition have shown about a 50 per cent increase this year. It has been especially noticeable lately."

Sounds like shades of the old Kentucky and Tennessee feuds, doesn't it? But if proration breaks down in East Texas, the turmoil and strife let loose will make those old feuds look like ping-pong contests. Either that or several dozen students of the situation are all wrong.

By way of a starter, which incidentally could not be attributed necessarily to the proponents of proration, two wells have been dynamited. One belonged to Humble Oil & Refining Company. The other to Shell Petroleum Corporation. Without assuming credit for the deed, some of the farmers say it served the Humble right for not meeting the price increase. Others, of course, said no such thing, and intimated they appreciated the company's attitude. As for the Shell well, the only explanation the writer could run across was that it was a plain case of mistaken identity, and that whoever made the mistake would be too embarrassed to go through a process of restitution. "A man jes natcherly don't

"Supremacy"



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like to admit he done something dumb," they say in East Texas.

After the second dynamiting, a third thrill was projected for some pipe line company or producer, but the party was called off due to the fact that officers ran across the dynamite-loaded truck hidden in the woods before the dynamiters had an opportunity to use it.

Here is a point to drive home. The greatest damage will not come to the oil industry through the failing of proration. It will come as a result of that failing. It will bring into play, unleash, so to speak, an element that will murder, pillage and destroy. Oil men, farmers, women, children and property will suffer alike.

Whether you know it or not, the area covered by the East Texas oil field today, right now, is housing some of earth's most desperate criminals. Narcotic rings are active. Sale of drugs is tremendous, and the word is used advisedly. Crime is so rampant that some of the peace officers don't know where to begin. This is not hearsay. It's grand jury finding. That body has, and is apprehending almost daily emmisaries of the world's greatest underworlds. More than 1200 undesirables have been shipped out by the various law enforcement bodies, most of them to face charges elsewhere. In excess of that number remain as identified communists, people America has gotten in the habit of associating with crime. "But you can't ship away or lock up a man just because he's a communist," say the officers, "you've got to have evidence to apprehend him first."

Two business houses were having difficulty in coming to a settlement of a certain matter. A lawsuit seemed unavoidable. One day the executive of one of the firms received a strange, dapper young man in his office.

"Understand you have been having trouble with so and so," said the young man.

"Yes. Why?" queried the executive.

The man threw down a card bearing his name and affiliation with a notorious Chicago gang, with the remark:

"For a very reasonable figure I will remove the opposition."

That's only one case for illustrative purposes. Others too numerous to detail establish the presence of a regular host of criminals in East Texas. And those boys have been in the game too long not to know how to take advantage of conditions which usually just precede martial law. They are simply itching for a chance to make undercover, closed-door law violation a wide-open, big-time racket in East Texas. The fall of proration would be their meat.

The Role of the Petroleum Geologist Today and Tomorrow

FREDERIC H. LAHEE*

THE American Association of Petroleum Geologists had its origin not many years after the application of geology in the search for oil began to receive real encouragement. The association came into existence in 1917. At that time the attention of petroleum geologists was largely concentrated on surface mapping of exposed beds, which, by their dip and trend, might give indication of subsurface structures favorable to oil accumulation; and, where wells had been drilled, efforts were made to correlate the records of the formations penetrated as described by the drillers. For the most part geologists were then limited to the use of plane table, barometer, drillers' logs, and cuttings washed up or bailed up during the drilling.

For the better interpretation of subsurface conditions, more care was taken in securing samples. Gradually the value of coring was impressed upon the industry—coring in the wells drilled for oil and coring in shallow holes dug for purely informational purposes.

From this improvement in sampling evolved more precise methods of laboratory examination of the cores and cuttings. Micro-paleontology thus received a strong impetus and its value, once recognized, led to its introduction into the geological departments of many of the oil companies.

In the early 1920's, geophysics was introduced as offering new methods of investigating subsurface geology by observations on the surface. The magnetometer was used to map areas of varying magnetic intensity. The torsion balance was used to measure variations in mass. The seismograph was used to record variations in the earth's elasticity when affected by vibrations artificially produced. And several kinds of electrical observations were applied to measure variations in electrical potential below the earth's surface. Most of these methods were aimed at correlating the observed physical variations with geological structure.

In these and in many other ways, as for example in airplane mapping, in chemical analyses of oil-field waters and possible pay sands, and in the measurement of underground temperatures, science, applied to the search for oil, was constantly growing more complicated and more precise. The whole trend has been toward diversification of methods, and at the same time toward improvement of technique. The whole striving has been for more oil, not in the aggregate, but for each individual operator or operating company. Competition has developed and diversified our science of petroleum geology, and competition has effected a present available oversupply of oil. This is the state into which the oil industry had been brought when the world depression settled over all.

It seems to me that, when we try to analyze present conditions or future prospects, we should endeavor to discriminate between the oil industry itself, on the one hand, and the general business depression, on the other hand. There are certain unfortunate circumstances which apply to our industry, but they likewise apply to all other industries. What most vitally concerns us is the situation of our industry, and in particular of our science, as this might be irrespective of the depression.

I think that we must all admit, when we look at the problem in this way, that we are actually at the threshold of a new era. We are passing from an era of intense, unbridled competition into an era

(*Continued on page 71*)

*Presented at Ninth Annual Meeting of the Pacific Section, American Association of Petroleum Geologists, Los Angeles, November 3, 1932.

Market Demand Law Strengthens Conservation Statute in Texas

(*Continued from page 23*)

tion of the present plight of Texas oil producers. Economic facts related to oil production were placed before the law makers. The number of persons employed by the petroleum industry in Texas, the amount of money paid in royalty to land owners and the taxes that go to the state on gross production as well as royalty ownership of the University of Texas each came in for consideration of both Senate and House members.

Sentiment at first seemed to be against the measure. This changed, however, and the final attitude was that the legislature should give the petroleum industry the sort of law the majority of its representatives wanted.

Many amendments were offered while the measure was under consideration but most of these were voted down. One that stuck came from the office of the Texas Attorney General. It is to the effect that nothing in the measure shall be accepted as lessening the existing statutes as to the control of trusts.

MEN IN THE INDUSTRY'S NEWS

DR. SIDNEY POWERS, consulting geologist for Amerada Petroleum Corporation at Tulsa, died November 5 in a St. Louis hospital following an operation.

Dr. Powers was born September 10, 1890, in Troy, New York, where he attended public schools. Further education consisted of a B.S. degree from William and Mary in 1911, a master's degree from the Massachusetts Institute of Technology, and a doctor's degree from Harvard.

During 1916 and 1917 Dr. Powers was chief division geologist for The Texas Company in the Mid-Continent area, leaving the organization to become an assistant geologist with the United States Geological Survey. During the war he was a geological officer of the A.E.F. in France. Shortly after the war, he helped organize the Amerada Petroleum Corporation, which he served as chief geologist from 1919 to 1926.

Dr. Powers' professional affiliations included the Geological Society of America, the American Association of Petroleum Geologists, of which he was a past president, the Society of Economic Geologists, the Institute of Petroleum Technologists, and the American Institute of Mining and Metallurgical Engineers. He was a great believer in dissemination of information, as witnessed by his voluminous contributions to science in the way of geological papers.

Funeral services for Dr. Powers were held in Tulsa following cremation in St. Louis.

O. S. THORP, district foreman for Mid-Kansas Oil & Gas Company, has been transferred from Gordon, Kansas, to El Dorado, Kansas.

J. S. O'DONNELL, Seminole district superintendent for Sinclair Prairie Oil & Gas Company, has been transferred to Augusta, Kansas, where he succeeds A. T. Watson, who recently resigned to become general superintendent of production for T. C. Johnson.

CARL YOUNG, secretary of the production division, American Petroleum Institute, will review the progress of standardization of equipment before the Tulsa Purchasing Agents Association in their meeting of Tuesday evening, November 22.

E. R. ATWILL, formerly geologist for Union Oil Company in the San Joaquin valley, is representing the Water Mining Corporation in California.

EDGAR B. DAVIS, president United North & South Development Company has returned from a trip abroad.

CHARLES F. ANDERSON, 65, independent operator, died at his home in Dallas, Texas, November 2 after a brief illness. Engaged in the oil business for more than a score of years, Anderson moved from Pittsburgh, Pa., to Shreveport, La., in 1916 to enter the land department of the Arkansas Natural Gas Company, and in 1918 assumed charge of the company's land and lease activities in Texas. He resigned in 1921 to become general manager of the U. S. Tex Oil Corporation, and after two years accepted an offer to become manager land department in the southwest for the Arkansas Fuel Oil Corporation, holding that position until ownership of the concern changed hands about three years ago. He is survived by his wife, a son, Fuller Anderson; a daughter, Mrs. Henry P. Inge; and a brother, George Anderson, all of Dallas.

A. H. HAND, assistant comptroller for Union Oil Company, has returned to Los Angeles after an extended Eastern trip. He is chairman of the Pacific Coast Section of the American Petroleum Institute statistical committee.

WINIFRED CLARKE

England's only woman petroleum technologist was the only woman to dine with nearly 250 men at the annual gathering in London of the Institution of Petroleum Technologists.

P. J. OLIVER, purchasing agent for Mexican Gulf Oil Company at Tampico, Mexico, arrived in Houston recently on a combined vacation and business trip.

H. A. KING, vice president of Sinclair Prairie Oil & Gas Company in Houston, is recovering from an operation for appendicitis.

R. D. MATTHEWS, executive vice president of Union Oil Company, has returned to Los Angeles after an extended Eastern tour. He used the greater part of a vacation by returning by way of the Panama Canal.

R. E. COLLOM, formerly general manager for Continental Oil Company in California, has been transrerred to company headquarters in Ponca City, Oklahoma. He was one of the original Marland Oil Company executives in California and was at one time State Oil and Gas Supervisor.

PAUL N. BOGGS, vice president of Union Oil Company and head of the production department, is looking after company interests in Texas.

J. H. JENKINS, manager of production for Associated Oil Company, has been spending some time in Los Angeles.

CARL VON BIBRA, president of Exeter Oil Company at Los Angeles, was thrown from a horse and seriously injured while riding in the Palos Verdes hills, near Los Angeles, November 7.

E. W. MARLAND, at one time the largest independent oil operator in the world, will represent the Eighth Oklahoma district in the next congress, replacing C. C. Garber, republican. Mr. Marland came to Oklahoma from Pennsylvania 23 years ago.

HENRY A. REYNOLDS, 50, assistant general superintendent of production for the Cranfill-Reynolds Company, Houston, died November 9 in a hospital at Abilene, Texas, as result of complications following a minor operation. He was born on an oil lease in West Virginia, and remained in the oil business throughout. Since the entrance of his company in the East Texas oil field he has maintained his family home at Longview, Texas. Among those surviving is a brother, Harry Reynolds of Houston, vice-president of Cranfill-Reynolds Company, in charge of production.

New Jersey Company Explains Position of Price Increase

REVIEWING the crude oil situation in its issue for October released this week, The Lamp, official publication of Standard Oil Company (New Jersey), gives as the reason for that company's purchasing subsidiaries in the Mid-Continent and Texas not participating in the late advance in crude prices. In the same connection is presented a tabulation of "The Industry's Position" as based on the August report of the United States Bureau of Mines.

The Lamp says that the New Jersey companies because of large production of its own crude, profits from higher crude prices, but that the company as a merchant cannot pay higher prices for crude from which it makes gasoline to sell in competition with refiners who are securing their crude supplies at less than the posted price. It says that current prices are profitable to the average producer, while wholesale gasoline prices are unprofitable. To quote:

"In February, 1930, following a reduction in the price of crude oil by producing subsidiaries of Standard Oil Company (N. J.), The Lamp made this comment:

" 'When refinery runs exceed market needs and create a surplus of products sufficient to depress the wholesale price of gasoline, the value of crude is being reduced even though the posted price is unchanged.

" 'Fluctuations in the price of crude and all other commodities are not ultimately controlled by individuals and corporations, but by conditions. The economics of any business may run contrary to the general trend of prices of raw material and products for a time, but in the end such an unsound condition must succumb to correction by the law of supply and demand. Since the only measure of the value of crude is the price realized for the products, the companies affiliated with Standard Oil Company (N. J.) found it necessary to adjust their posted prices at which they would purchase crude to a gasoline market that had been steadily declining.

" 'This company is not now, and never has been, interested in depressing the price of crude oil. Its producing investment is of such size that the company is seriously affected when posted prices for crude are at an unremunerative level. But by virtue of its activities as a merchant this company is keenly aware of the unescapable fact that the prevailing price of a barrel of crude cannot be for any considerable period more than the total realization from the sale of the products obtained therefrom.

" 'We believe in conservation in the interest of the public and the industry and stand ready to cooperate to the fullest extent in any workable plan to this end. For conservation to be effective, the refiner and producer must each do his part.'

"The company has held consistently to the belief that product values must justify crude prices. Almost without exception, product values have failed to justify posted crude prices in any month since the summer of 1929. Purchasers of crude have paid these posted prices as their contribution to the conservation efforts of the state conservation agencies.

"Crude prices are today profitable to the average producer. Wholesale gasoline prices are unprofitable, and have been for months to the refiner who buys his crude at the posted price. A relatively small surplus or shortage in volume determines the wholesale prices of products. Standard Oil Company (N. J.) is unable to find any equity in a situation that would require it to pay, as a large buyer, more for crude than is paid by innumerable small buyers, who have secured, and are still able to secure, their entire crude requirements at less than the prices Jersey has currently posted. On the same basis, this company can hardly be expected to pay a price for crude higher than the equivalent price which a number of producer-refiners make on their crude that they sell in the form of gasoline.

"Of the approximately twenty companies which post prices in the Mid-Continent and Texas, at least seven produce more crude than they require. They sell this surplus crude to units having refinery requirements in excess of their own production. Four companies of the other thirteen are normally about in balance between their productoin and refinery requirements. Of the nine units that actually purchase in substantial quantity, three buy more barrels of crude than all others combined, and two of these three account for nearly 50 per cent of the total crude purchases in the Mid-Continent and Texas. All twenty are integrated companies, aggressively competing for retail markets.

"Standard Oil Company (N. J.), through its subsidiaries, will be glad to pay higher prices for crude when the product values realized by its refineries justify higher prices."

"The outstanding factor in the midsummer position of the industry, as revealed by Bureau of Mines figures for August, was the sharp drop in consumption. The domestic market for crude and products fell off 14 per cent from that of August, 1931, and the total consumption, including exports, were nearly 16 per cent less than a year ago. In the case of

The Industry's Position

(From The Lamp)

	1932		Increase or		Aug. 1932 Inc. or Dec. from
	August	July	Decrease	August 1931	Aug. 1931
Daily Average, U. S. Crude Production.	2,136,000	2,139,000	—3,000	2,194,000	—58,000
Daily Average, U. S. Imports of Crude.	60,000	49,000	11,000	87,000	—27,000
Daily Average, U. S. Crude Supply.....	2,196,000	2,188,000	8,000	2,281,000	—85,000
Average Price, 36° Mid-Continent Crude	$0.92	$0.92	.....	$0.46	$0.46
Oil Producers Completed	1,145	1,279	—134	441	704
Wells Drilling Last of Month.....	2,322	2,237	85	2,217	105
Daily Average, U. S. Imports of Products	51,000	29,000	22,000	104,000	—53,000
Daily Average, Domestic Consumption Crude and Products	2,272,000	2,053,000	219,000	2,655,000	—383,000
Daily Average, Exports Crude and Products	274,000	232,000	42,000	373,000	—99,000
Daily Average, Total Consumption Crude and Products	2,546,000	2,285,000	261,000	3,028,000	—482,000
Total Stocks of Crude and Products....	620,908,000	627,287,000	—6,379,000	646,613,000	—25,705,000
Daily Average, Crude Run to Stills....	2,170,000	2,305,000	—135,000	2,602,000	—432,000
Daily Average, Motor Fuel Production..	1,085,000	1,114,000	—29,000	1,126,000	—41,000
Daily Average, Domestic Motor Fuel Consumption	1,145,000	1,035,000	110,000	1,348,000	—203,000
Daily Average, Exports of Motor Fuel..	76,000	76,000	.....	136,000	—60,000
Daily Average, Total Motor Fuel Consumption	1,221,000	1,111,000	110,000	1,484,000	—263,000
Total Stocks of Motor Fuel	56,548,000	60,646,000	—4,098,000	51,750,000	4,798,000
Price of U. S. Motor Gasoline, F. O. B., Group 3	4.30c	4.48c	—.18c	4.26c	.04c
Average Tank Wagon Price Gasoline, 50 cities, ex-tax, First of Month.....	13.17c	13.49c	—.32c	11.00c	2.17c
Average Gasoline Tax	5.14c	5.14c	.....	*4.09c	1.05c
Daily Average, Domestic Consumption Gas and Fuel Oil	667,000	651,000	16,000	825,000	—158,000
Daily Average, Exports Gas and Fuel Oil	45,000	39,000	6,000	73,000	—28,000
Daily Average, Total Consumption Gas and Fuel Oil	712,000	690,000	22,000	898,000	—186,000
Average Price, Bunker C Fuel Oil, Ex. Term. N. Y. H.	$0.85	$0.85	.....	$0.71	$0.14

*Federal Tax of 1 cent not in effect.

gasoline the percentage drop was slightly greater.

"As expected, imports of both crude and gasoline were lower in July after the rush of tankers to reach here with foreign cargoes before the tariff went into effect, though they picked up during August. Exports continued way below 1931 levels, shipments of gasoline being 44 per cent under August last year and total exports showing 26 per cent less."

Finney County Wildcat Test Is Well Away From Fields

Wichita, Kans.—Joe Denham and L. F. Myers are drilling below 1000 feet in Brown 1, CSW Section 16-25s-34w, Finney County wildcat test located about nine miles southwest of Garden City and more than 30 miles from the nearest production. Operators have taken a lease on the Brown ranch, which includes 17,600 acres, sub-divided in tracts of 640 acres each. It will be the second test in Finney County, the first having been drilled and completed on October 29, 1924, by Garden City Oil Company on the Wrightson farm, SEc Section 35-21s-30w. This old test went to 2842 feet and was abandoned dry. None of the counties adjacent to and westward of Finney County have been explored to any great extent and the vast area has seen but few tests. Nearest production is south in Morton, Stevens, Grant, and Haskell County, where gas is found in the lower Permian at depths ranging from 2600 to 3000 feet. Only one test in the area is thought to have penetrated even a portion of the Pennsylvanian and this is not certain. The Denham and Myers venture most certainly is among the rankest wildcats and will be watched with considerable interest. Contract depth is not known.

Harrison County Test Going Deeper After Gas Showing

Marshall, Texas.—Great Eastern Oil Company's W. L. Rudd 1, William Steele Survey, Harrison County, East Texas, tested an estimated one million cubic feet of gas and a large amount of salt water, after 4½-inch was set with packer to test a gas show in the Nacatosh at 960 feet and last week was drilling deeper.

Haynes & Hall of Shreveport have acquired a 3500-acre block in the James Shelborn, S. Ussery, Peter Teal, S. F. Alston and B. C. Jordan surveys, slightly over one mile north of this test, for a small cash consideration and $15,000 from one fourth of first production. The consideration also involves a six-months drilling obligation.

Big Lake Extension Well Drilling Cautiously Ahead

San Angelo, Texas.—A minor extension to the east was given the Ordovician lime horizon in the Big Lake field last week when Group One Oil Corporation's (Continental Oil Company) University 5-B gauged 470 barrels of 46 degree gravity oil and 2,800,000 cubic feet of gas at 8483 feet. This outpost will be deepened and tested at intervals, but will not penetrate the Ordovician to as great a depth as the other 11 deep completions, owing to bottom hole water appearing in eight of the wells on production. The usual prolific gas flow in the top section of the lime appears to be absent in University 5-B, and another unusual feature is that the gravity of the oil is 45.6 degrees at 56 degrees temperature, indicating a high lube oil content, with a ready premium price available.

The depth record for Texas was regained by the Big Lake field through deepening of Big Lake Oil Company's University 1-C, which was in lime at 9164 feet late last week. The record was previously held by Ed. M. Jones' 9131-foot failure in the Refugio field. University 1-C depleted its commercial production in the Ordovician at 8909, with water encroachment flooding the lower horizon, and it is to make a try for an entirely new producing level, with 14,000 feet as the depth goal, if possible. Three other Ordovician tests underway in the field will not reach the producing horizon until after the first of the coming year.

Sid Richardson et al's John Sealy 2, located in southern Winkler County and more than a mile from nearest production, was moving back boiler to drill in after encountering 200 000 cubic feet of gas at 2450 feet. Richardson has three rigs operating on the Scarborough ranch in the Llano pool, Winkler County, with a completion due next week on Scarborough-Tidal 1, which has drilled cement plug after cementing seven-inch casing at 2527 feet. This test topped the lime at 2455 feet, with a surface elevation of 2932 feet. Scarborough-Skelly 1 is drilling below 1400 feet, and Scarborough 1-A is drilling below 900 feet. Magnolia Petroleum Company's Scarborough 3, a work-over test, is drilling hard gray lime at 3032 feet, and making 60 barrels of oil daily from original pay at 2843-76 feet.

The Role of the Petroleum Geologist Today and Tomorrow

(*Continued from page 68*)

of greater sanity in the development of oil fields. The industry, and in many cases the public, is becoming conscious of the ultimate value of systematic drilling and orderly production. I believe that these practices have come to stay, and that more and more the oil pool will be managed, as it should be, as a single body of fluid, with all its parts interrelated, and with the natural energy present in the reservoir recognized as the common property of all owners in the pool.

How do we petroleum geologists fit into this picture? In the first place, exploration for new pools has not come to an end. Surface mapping is more exacting than it used to be. It demands more thought, more real ability than formerly. The conspicuous structures have been found, but there is still much to be done in very careful study of surface geology. Reconnaissance can be assisted by airplane maps, and detail work, by shallow exploratory drilling. Geophysical methods are still undergoing improvement, but their results will always call for geological training for proper interpretation. But where we need most assiduously to demonstrate our usefulness is in connection with the new conception of oil field development. Every program of systematic drilling and production must be founded on geology. We must realize clearly that reservoir conditions are geology; that the porosity and permeability of a sand, the pressure within the reservoir, the temperatures existing in the reservoir, and other similar natural conditions are just as much a part of the geology of the pool as the form and type of structure with which the oil accumulation is associated. These are, none of them, engineering subjects. The petroleum engineer has to formulate his plans for drilling and producing based no more on a knowledge of these reservoir data than on a knowledge of the structure itself.

With the advent of the new era it seems to me that not only do we geologists retain our old place in the realm of exploration, but also we have presented to us a further opportunity for applying our training, through observation and experiment, in advancing the cause of orderly development. Both the geologist and the petroleum engineer are necessary. Together they form an indispensable team for devising the most efficient program of oil field practice. Together they should sit on every committee assembled for the purpose of debating proration or unitization. Together they should cooperate for the benefit of every owner in a pool. Let us not overlook or minimize our functions in this scientific team as we pass into the new era.

CALIFORNIA FIELDS

Too Much Cost to Condition Wells for Further Open Flow Tests of Older Fields. Water Not Bad at Kettleman.

BRAD MILLS, *Staff Representative, Los Angeles, California*

Huntington Beach Open Test May Never Be Made

Los Angeles.—Postponement of the open flow test at Huntington Beach followed a similar postponement at Long Beach, and was not entirely unexpected in the face of a doubtful revenue which was supposed to bear the extra expense. The Huntington Beach field was in no condition for an open flow test, but major operators were working to place idle producers in shape. The umpire has announced that the money for making the test is not available nor in sight, and that the postponement may be permanent.

Of the 546 producing wells in the Huntington Beach field, 204 were idle on the first of the month. The cost of placing these wells on production would have been greater than the good derived from an open flow test.

Long Beach has 1104 producing wells, of which about 150 are idle. Many of the producing wells in this field are in no condition to produce at their maximum rate.

The Santa Fe Springs open flow test was not expensive, but operators in remaining fields shun any extra expense. They also dread the thought of cutting back to offset their excesses.

Los Angeles Basin Fields Still Have Deep Prospects

Los Angeles.—The amount of deep drilling in the Los Angeles basin will be largely determined by the improvement in the oil industry. Some of the leading fields have been fully, or nearly fully, developed below the original producing zone, but several of the smaller fields will be heard from in due time.

The deep zone development has been checked at Dominguez for some time, and landowners have been convinced that it will not pay them to press operators to drill more than a sensible number of wells. Many leases at Dominguez expire at the end of 20 years, and the oil companies have been accused along with the landowners of rushing developments.

The Inglewood field should be one of the best deep zone producers in the Los Angeles basin. Curtailment leaders have feared the consequences of a deepening campaign for some time, but the unrest has been quieted by diplomacy on several occasions. This field has been a remarkable producer in the first producing zone, and at least one deeper producing zone has already been discovered.

The Rosecrans section of the Athens-Rosecrans field will produce oil from the deeper zones, but the area may not become a disturbing factor. Barnsdall Oil Company is testing a zone around 7000 feet, but the first production test did not point to a large production. A deeper zone was found several years ago in the Athens section.

Long Beach and Santa Fe Springs seem almost fully developed in the deeper zones, but it is not safe to say that a still deeper producing formation will not be found.

San Miguelito Drilling Should Not Be Rapid

Ventura, Calif.—Gradual development of the San Miguelito field, a new producing district located about midway between the Ventura Avenue and Rincon fields, should be expected, and the new area may become an economic factor in the production of refinable oil. The field was discovered by Continental Oil Company and Chanslor-Canfield Midway Oil Company, the former having first found oil and the latter having completed the first commercial producer. The very rugged nature of the district does not invite intensive drilling, while the large leases are also a governing factor.

Chanslor-Canfield Midway Oil Company will drill another well in the field, and hopes to complete the test in the good producing formation opened a short time ago by Continental Oil Company. In drilling Hobson A-2 to 10,030 feet, the company established a depth record which stood for some time. This well was plugged back to around 7800 feet and has produced a small amount of oil on the compressor for nearly two years. There is some question as to this well being a commercial completion, but it was at least responsible for completion of a second discovery well.

Honolulu Consolidated Oil Company is drilling below 1500 feet in Valenzuela 1, on indirect offset to the discovery well, and probably will extend the field a short distance.

Continental Oil Company is in no hurry to develop its extensive holdings further, but may drill another well if an offset is required. The first completion was deepened from 6750 feet to the 7100-foot level, and production increased from less than 400 barrels to 2600 barrels.

Plan for Lost Hills Deep Test Stimulates Leasing

Bakersfield, Calif.—Arrangement to drill a joint deep test at Lost Hills has stimulated leasing of edge tracts which might be in the trend of production, should the field extend toward the north and east. E. C. Smith recently leased more than 3000 acres from Josephine W. Shields, and a well may be drilled northeast of the field. Several shallow core holes have been drilled in the district.

Plans for drilling a deep well in the field have not been completed, but the leading operators are trying to arrive at an agreement to permit drilling to a greater depth than has been reached in the past. The three or four deep tests drilled during the past two years were shut down or abandoned at comparatively shallow depths, and really proved nothing. The struggle to drill through the high pressure water zones so tired the operators that they were content to stop when they thought their first chances at production were lost.

Two or three companies want to revive drilling in the field, and are willing to back their convictions with the necessary funds. Richfield Oil Company and Associated Oil Company are heavily interested in the venture. A well may be drilled to 8000 feet to test the possibilities of the very deep zone at North Belridge.

The shallow producing zone at Lost Hills has been a steady producer, and the deeper zones in neighboring fields and the relationship to Kettleman Hills offer more than ordinary promise for a deeper producing zone.

Half of Wells in Midway-Sunset Area Are Idle

Taft, Calif.—The vast Midway-Sunset district, which was once the most important in the state, has shown no tendency to take its place among the active fields of the San Joaquin valley. Of the 3700 producing wells in the area, exactly half are idle. This fact is enough to make operators think before drilling additional wells.

The expected improvement in the crude oil market will result in drilling of a number of leases which were not developed fully during the previous de-

velopment waves, but there is some doubt as to whether the district will ever witness the spasm of activity of the early days.

Reasonable assurance of commercial production over a wide area remains an attractive goal, and many small operators will need more oil under prosperous conditions. The major companies will be forced to drill offsets on many edge tracts, but they have been able to suspend operations during the past two or three years.

Standard Oil Company is fishing for drill pipe at 9760 feet in Mascot 1, a Midway test which held the depth record at 9630 feet for some time in 1930. Deepening of the well was prompted by lease requirements, but the chance for opening a very deep zone is considered remote.

California Less Aggressive In Improving Equipment

Los Angeles.—Development of improved drilling equipment in California has not been as rapid during the past two years as during the previous two years, due to a slackening of interest by both oil and supply companies. With only a few fields active, old equipment has played an important part in the drilling of the past two years. The only exception is Kettleman Hills, where the chief improvements are being recorded.

The extremely deep zone at Ventura Avenue has awakened an interest in better drilling equipment, but the limited amount of work there has not justified heavy expenditures. Equipment for drilling to 10,000 feet is in use on a moderate scale in this field.

Supply companies feel that sales do not justify the experiments of a few years ago, while the oil companies have lowered allowances for experiments and improvements. This is the natural reaction from the extensive research of the boom days. The producing companies will be forced to continue their research, if they are to keep pace with Mid-Continent operators.

The impending deep drilling in several fields calls for better equipment than the average on the racks of major producers.

Casper, Wyo.—The Texas Company appears to have a good chance of opening a new oil field at Alkali Butte, in Fremont County, 100 miles west of Casper. The field has been proved for gas in the Frontier formation by The Texas Company for more than a year. The hole is now bottomed at 4263 feet on top of the Muddy sand, and string of 9⅝-inch casing is being run preparatory to drilling in. A core of the sand shows considerable oil and gas saturation.

Northwest Flank of North Dome Proving Valuable

Coalinga, Calif.—The northwest flank of the North Dome at Kettleman Hills shows little affect from the chain of large completions, completion a week ago of Union Oil Company's King 2 with an initial flow of 12,600 barrels having dissipated rumors that water should be expected on the edge tracts. King 2 was drilled to 8500 feet and completed with 1061 feet of 6⅝-inch perforated liner. The 8⅝-inch shutoff was made at 7038 feet, but the upper portion of the Temblor formation was shut off to improve the gas-oil ratio. Despite this precaution, gas production was around 45,000,000 cubic feet. Three 1½-inch beans were used during the test, and the well was given every chance to establish its best potential.

The northwest slope of the North Dome has accounted for the best initial average of any part of the field. This section was definitely placed in the doubtful column prior to completion of the first well, but the long chain of large producers has stamped it as one of the most valuable sectors on the North Dome.

Petroleum Securities Company will soon complete Felix 3, a North Dome test which was deepened to produce from the lower Temblor formation. More than 1600 feet of the producing zone has been cored, but the well will be stopped in the Whepley shale. Completion is expected within two weeks.

Identity of the formation in Kettleman North Dome Association's No. 38-34J remains a very interesting question in North Dome development circles. More than 2100 feet of formation has been penetrated below the top of the Temblor, and the hard gray sand now being cored at 8535 feet does not give a very definite clue upon which to base a conclusion. Possibility of production below the Temblor has interested operators for a long time, and it will be only a matter of time until a deeper test will be made. Some oil has been found below the Temblor near the field and a deeper production at Kettleman Hills is possible. The Kreyenhagen shale should be found just below the Temblor, while the Eocene should be reached a little deeper. Little is known of the deeper formations in the bed of the valley, and it is possible that the outcrops along the west fringe may prove misleading.

North Kettleman Oil & Gas Company established a new depth record for the field in Lillis-Welch 1, a northwest extension test which is drilling below 9525 feet. The cores do not show more than extremely light cuts, but the well still has a remote chance to extend the field. Drilling a wildcat where the formations slope has been a real achievement.

Development of the central and southeast portions of the field has been slow, due to the necessity for offsetting on the north and northwest flanks. Enough drilling has been done, however, to prove that the southeast point is much less potent than the northwest end. Apparent thickening of the formations toward the southeast appears easily offset by a better sand condition toward the northwest.

Around a dozen drilling wells will be active during the winter months, with new locations and resumption of operations in idle wells about equalling completions. Both Standard Oil Company and Kettleman North Dome Association can start drilling on short notice, but no development race is expected. Union Oil Company has made location for King 3, another test in the northwest sector.

Field production has been running sharply over the allowable, but a portion of the excess was caused by a new completion. The principal operators have not been satisfied with their new allowable of 54,000 barrels, and have been producing around 59,000 barrels daily.

The field remains the only district in

Richfield North Extension Test Having Pipe Trouble

Los Angeles.—Completion of an extension well in the Richfield field by Forward Petroleum Corporation was an important development in this part of the Los Angeles basin. After drilling to 3786 feet, the well showed a high gas pressure and flowed for some time, but trouble in landing the 4¾-inch liner prevented actual completion. A few more cores may be taken to obtain a steadier flow. This well is located north of the field and is considered an important test. Surface indications give some support to the theory that another anticline has been found, but most geologists are inclined to believe that the well merely extends the field toward the north. The gravity of the oil is much higher than that produced in the main field, and the gas pressure is far above the average for the district.

WHAT USERS SAY · No. 12

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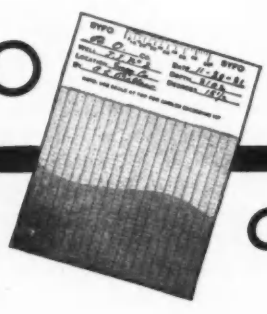

Clinograph

SPERRY-SUN WELL SURVEYING COMPANY

1608 WALNUT STREET, PHILADELPHIA, PA.

DALLAS, TEXAS
1501 Caruth Street

TYLER, TEXAS
Peoples Natl. Bank Bldg.

LOS ANGELES, CALIF.
415 Petroleum Securities Bldg.

TULSA, OKLA.
402 Petroleum Building

WICHITA FALLS, TEXAS
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the state which could raise its flow by a wide margin. The potential has been placed at 264,000 barrels, but it is next to impossible to estimate the potential of a field that has never been tested.

The Middle Dome is still a questionable factor. Standard Oil Company has been unable to clean out to bottom in No. 6-29V, and Petroleum Securities Company has apparently lost Burbank 1. Abandonment of the third drilling well did not mean much, but it indicated that the Middle Dome will not be a large producing field, when measured in acres.

California Geologists Hear Talk on Local Earth Movement

Los Angeles.—Frank A. Morgan, Rio Grande Oil Company, was elected president of the Pacific Section of American Association of Petroleum Geologists at their Ninth Annual meeting at Los Angeles, November 3 and 4, and Eugene Templeton, Union Oil Company, was elected secretary and treasurer. More than 200 geologists attended the sessions, which were held at the Biltmore Hotel.

One of the most interesting papers presented was given by T. W. Koch on "Analysis and Effects of Current Movements on an Active Thrust Fault in Buena Vista Oil Field, California." It was shown that recent casing failures in 22 wells lying on the south flank of the Buena Vista field have been caused by movement of an active thrust fault. Surface evidence of the rate and recency of movement on it is given in its newly made scarp, and by the buckling of gas, oil and water lines at and near its trace. Computations made from measurements on bent pipe lines and collapsed casings show that the overriding block is moving southward at a minimum average rate of 1½ inches per year. The fault probably is the result of differential slipping between beds on the north flank of the structure induced by current folding.

Other interesting papers or discussions during the two days were:

"The Role of the Petroleum Geologist in the Problems Confronting the Oil Industry Today," by Frederic H. Lahee.

"The Speed of Migration of the Extremely Heavy Oils of the Casmalia Type," by William W. Porter, II.

"Progress of Geologic Branch of the California State Division of Mines," by Olaf P. Jenkins.

"Some Problems in the Correlation of Miocene Formations in California," by W. D. Kleinpell, R. D. Reed, M. G. Edwards, Paul P. Goudkoff and Frances D. Bode.

"The Knoxville-Shaste Succession in the Coast Range of California," by F. M. Anderson.

"Tertiary Stratigraphy in the Tesla and Carbona Quadrangles, California," by R. G. Greene.

"The Problem of the 'San Diego' Formation," A. J. Tieje and Glenn Ferguson.

"Notes on the Geology of the Rincon-San Miguelito Area, Ventura County, California," by R. E. Stewart.

"Correlation of Reflection Seismograph Records in California," by Henry Salvatori.

"Pliocene Conglomerates of the Los Angeles Basin and Their Paleogeographic Significance," by Everett C. Edwards.

The Pacific Section of the Society of Economic Paleontologists and Mineralogists was held in connection with the geological meeting. A special evening session was held Thursday night, November 3, at the Clark Hotel. The two papers read were:

"Stratigraphy and Micropaleontology of the Eocene in the Cantua Creek-Tumey Gulch Area, California," by E. R. Atwill.

"The Leda Zone in North Coalinga and its Relation to Kettleman Hills," by A. A. Weymouth.

California Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
BUTTONWILLOW—		
General Pet.'s Morris 2, 6-28-23...	¶10	2495
KETTLEMAN HILLS—		
Union Oil Co., King 2	12,000	8500
SAN BERNARDINO COUNTY—		
John W.Sherman's No. 1, 33-2-8....	*	....

New Operations

HUNTINGTON BEACH—Matilda Shallemiller, No. 1B, 32-5-11.

MESA—R. H. McIntosh, Roskop 1, 28-4-27.

NORTH BELRIDGE — Belridge Oil Co., No. 20-35, 35-27-20.

ROUND MOUNTAIN—Howells Brothers' Howells 1, 32-28-29.

Wildcat Drilling Report

(Wells shut down not included)

NORTHERN CALIFORNIA

KERN COUNTY

BUTTONWILLOW — Milham Exploration Co.'s S. P. 43-1, 1-28-22, 12½ inch cas cmt 500 ft, will drill and complete in shallow deep zone.

DEVIL'S DEN—Tom Hannah's No. 1, 25-25-18, will run string of small cas, td 3455 ft. Pyramid Hills Oil Co.'s No. 1, 24-25-18, dr hard shale 2150 ft.

McKITTRICK—Welport Oil Co.'s No. 2, 19-29-21, dr gray sand 718 ft.

SANTA BARBARA COUNTY

CARPENTERIA—Casitas Oil Co.'s No. 202-2, 34-4-25, recovered fish, dr brown shale 2150 ft, slight oil and gas showings.

COAL OIL POINT—Bolsa Chica Oil Corp.'s No. 1A, flowing salt water and trace of oil, td 4089 ft; may drill another well nearer shore line.

CUYAMA VALLEY — Cuyama Valley Oil Corp.'s No. 1, 12-10-27, dr shale 1775 ft.

LOMPOC—W. M. Lee's Lompoc 1, 28-8-34, lcn and material.

ORELLA—Oakburn Drilling Co.'s Sperry 1, co 2821 ft.

SANTA MARIA—Superior Oil Co.'s Adam Core Hole 1, abn 296 ft; Kelley Core Hole 1, abn 684 ft; Newhall Land Core Hole 1, abn 763 ft; Newhall Core Hole 2, 26-10-33, lcn; Soares Core Hole 1, 28-10-33.

SANTA ROSA ISLAND—Standard Oil Co.'s Island 1, dr hard gray sand 4120 ft.

VENTURA COUNTY

CONEJO — International Oil Developers' Powell 1, 33-2-20, dr mixed rock and sand 2215 ft.

FILLMORE—Sovereign Oil Co.'s Leavens 1, 23-4-19, dr tar sand 468 ft.

HOPPER CANYON — Bardeen Pet. Co.'s Lankershim 2, 13-4-19, will put on pump at 2757 ft after drilling through good oil sand.

RINCON—Woodrow Pet. Corp.'s Woodrow 1, 4-3-24, hole caving at 5370 ft, td 5497 ft, may sd. Honolulu Consolidated Oil Corp.'s Valenzuela 1, 23-3-24, dr sand and hard shale 1465 ft.

SANTA PAULA—J. W. Mosher's No. 1, 22-4-21, dr shale 700 ft.

SESPE—Harmon and Deal's No. 1, 33-5-19, dr shale 1428 ft. H. A. Ivars' Star 7, 1-4-20, co 1616 ft. Merchants Pet. Co.'s Cochran 6, 1-4-20, co 100 ft.

SULPHUR MOUNTAIN—Wilshire Annex Oil Co.'s Thompson 1, 20-4-21, dr shale 720 ft, may make deep test.

TIMBER CANYON—Petro Well Producing Co.'s No. 4, 18-4-20, dr shale 1875 ft. Superior's West 3, 13-4-21, dr shale 5160 ft.

MISCELLANEOUS

KINGS COUNTY—Knudsen and Schmidt's Avenal 1, 36-23-17, co 5675 ft. Dudley Dome Oil & Gas Co.'s No. 2, 15-23-20, dr shale 1415 ft. Triune Gas, Oil and Land Co.'s No. 1, 5-23-20, fsh for drill pipe 1100 ft.

FRESNO COUNTY — Graham-Loftus Oil Co.'s No. 1, 20-15-18, rig.

MERCED COUNTY—Harry Bergman's Oro Loma 1, 12-12-11, ready to spud. Los Banos Pet. Co.'s No. 1, 26-10-9, rig.

SAN LUIS OBISPO COUNTY—Kent and McDonald's No. 1, 3-32-22, dr shale 3250 ft. Shell's Mahoney 1, 4-25-12, coring shale 3295 ft.

SOUTHERN CALIFORNIA

EL MONTE—Hutcheson and Andrus' Fee 1, 11-1-11, dr sand 565 ft.

HASLEY CANYON — W. A. Smith's Gilmore 1, 32-5-7, co 3112 ft.

HAWTHORNE—N. B. Hogan's Hogan 1, 23-3-14, dr shale 665 ft.

HERMOSA—Mira Vista Oil Co.'s Calico 3, co 2525 ft.

HUNTINGTON BEACH—M. Shallemiller's Permit 194-1B, 32-5-11, will drill to 2000 ft, present depth 1000 ft.

LYNWOOD—William L. Jones' Graham 1, 31-2-12, dr shale 4215 ft.

NEWHALL—W. L. Alexander's Alexander 1, 1-3-16, rigging rotary. W. T. Ball's Newhall 1, 34-3-16, redrilled to 1450 ft, co.

PLAYA DEL REY—Cooperative Dev. Co.'s No. 1, 26-2-15, coring shale 5959 ft. Del Ray Hills Oil Corp.'s U. C. S. 1, 26-2-15, rig.

WILMINGTON — Pacific Oil Investment Co.'s Lupie 1, 28-4-15, lcn.

SAN BERNARDINO COUNTY — Great American Pet. Co.'s Gapco 1, 18-2-8, rigging rotary.

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OKLAHOMA FIELDS

Wewoka-Holdenville Area Continues to Lead Activity New Pool Between St. Louis and Pearson Well Hedged.

FLOYD SWINDELL, *Staff Representative, Tulsa, Oklahoma*

New Seminole Producer Can Not Mark Very Big Pool

Seminole, Okla. — Hilton Phillips' Garrett 1, CSW SW SE Section 21-7n-4e, which headlined Seminole news last week with an initial production of 1940 barrels in 19¾ hours, made 2701 barrels in its first full 24 hours and repeated with 2426 barrels on the second day, flowing natural. Cromwell sand was logged at 3490 to 3530 feet, Hunton limestone at 3662 to 3927 feet, and Simpson dolomite pay at 4155 to 4158 feet. The new well is located about midway between St. Louis and Pearson Switch, so confined by the edges of these pools and by dry holes that its productive area can be of no great extent. Although the pay has been penetrated only three feet it is unlikely that the hole will be deepened except in event of sudden failure at the present depth. After several years of production in the nearby pools it is logical to assume that pressure at the edges of the newly discovered structure may be greatly dissipated and a relatively high water level may be expected. This condition apparently existed in the Sacred Heart area where Carter Oil Company's discovery well soon started making water although it was clean when completed. Two other wells in the area were still shut down awaiting connections with holes standing full of oil.

Barrett et al were bailing after setting 3501 feet of six-inch casing in No. 1, CSE SW NW Section 10-7n-4e, on the north edge of St. Louis. Operators cored limestone from 3500 to 3504 feet, sand with a show of oil at 3504 to 3525 feet, and sand and shale from 3525 to 3800 feet. This sand appears to be Cromwell. Mid-Continent Petroleum Corporation was drilling below 2030 feet in Hyde 1, CSW SW SE Section 31-7n-5e, in the area immediately east of the Sacred Heart pool.

Wewoka-Holdenville

The Wewoka-Holdenville area of western Hughes County continues to lead all Seminole areas, new locations being made at about the same rate as completions.

Manahan Drilling Company et al completed Long 1, SW SE SW SW Section 10-7n-8e, making an estimated 15,000,000 cubic feet of gas and a small amount of oil from Booch sand topped at 2879 feet and cored to 2930 feet. The well was bailed in but it was found that the one separator would not handle the flow so it was shut in to install another. Pringle et al's School Lot 1, SW SW SW Section 10-7n-8e, approximately two locations west of Long 1, set eight-inch casing at 2891 feet, seven feet in the Booch sand, and drilled to 2917 feet, where it had an initial flow of 490 barrels in 10 hours and was making an estimated 20,000,000 cubic feet of gas.

Rudman et al's Long 1, SE SE SW SW Section 10-7n-8e, a 150-foot east offset to Manahan Drilling Company's Long 1, had top of the sand at 2885 feet and was preparing to run eight-inch casing after coring a show of oil and gas to 2900 feet.

Wofford Drilling Company's Scott 1, NW SW SW Section 10-7n-8e, a recent completion, gauged 945 barrels in 13 hours and 25 minutes and shut in for additional tankage. Booch sand was reported at 2902 to 2916 feet. Burke-Greis Oil Company's Chapman 1, CSW SW NW, Section 10-7n-8e, three locations north of Scott 1, was shut in after making 367 barrels in 24 hours. The well was drilled to 2926 feet where it found water in the Booch sand and plugged back to 2922 feet. Producers & Refiners Corporation and Gypsy Oil Company are preparing to drill deeper in No. 1, CNW SE SW Section 9-7n-8e, old well completed February 22, 1932, for 7,000,000 cubic feet of gas in Booch sand at 2915 to 2982 feet. Operators plan on drilling only a few feet in search for oil.

Bowlegs Pool

Empire Oil & Refining Company is plugging to abandon Lucy 5, CSE SW SW, Section 14-8n-6e, old Wilcox sand producer in the central portion of the Bowlegs pool. The well originally was completed June 22, 1927, making 2171 barrels initially from Upper Wilcox sand at 4430 to 4449 feet. Deepened to 4557 feet in the lower Wilcox, it encountered a hole full of water.

Pontotoc County

Patsey Oil Company was preparing to shoot Shelton 1, SE NE SE Section 25-5n-4e, on the west edge of the Bebee pool. Top of the Viola limestone was found at 2382 feet and drilling continued to 2552 feet, where the well swabbed 40 barrels in six hours. Stanolind Oil & Gas Company was underreaming six-inch casing to 2485 feet in Roberts 4, CSW NW NE Section 32-5n-5e, on the east edge of the pool. Sylvan shale was reported at 2274 feet, and Viola limestone at 2403 feet. At 2463 feet, still in the lime, operators had 1700 feet of water in the hole with total depth at 2485 feet. Six-inch casing will be set down to shut off water.

Mason et al have up rig for Gordon 1, CSW NW NW Section 28-5n-5e, and Benedum and Trees were moving in machine for Gordon 1, CSW NW SW same section.

West Konawa Area

Watchorn Oil & Gas Company et al have announced location for Lowry 1, CNE SE NE Section 30-6n-5e, 1½ miles east of the new West Konawa pool in southeastern Pottawatomie County.

Creek County

Lima Oil & Gas Company has announced location for Starr 1, NW NW SE Section 18-15n-8e, southeast diagonal offset to Jillson et al's Starr 1, which recently extended the old Depew pool.

Alfalfa County

J. V. Bailey et al are pulling 5502 feet of six-inch casing and will rig up rotary tools to resume drilling in Acre 1, CSW NE Section 14-24n-11w, important wildcat test located in southern Alfalfa County and more than 40 miles from the nearest production. The test was shut down on June 9, 1931, after setting the six-inch string. Layton sand was reported at 4955 feet with a hole full of water at 5212 feet and a small showing of oil in sand at 5418 to 5430 feet.

Oklahoma City Interest All Centered in Southwest

Oklahoma City. — The Oklahoma City pool passed a relatively quiet week with all completions and new starts in the southwestern portion of the pool. Four of the five completions were by Phillips Petroleum Company which now leads the larger companies with six drilling wells and three rigs serving proration shutdown time. Early in the week there were four locations, eight rigs, 17 drilling wells, and 18 locations shut down. Most of the

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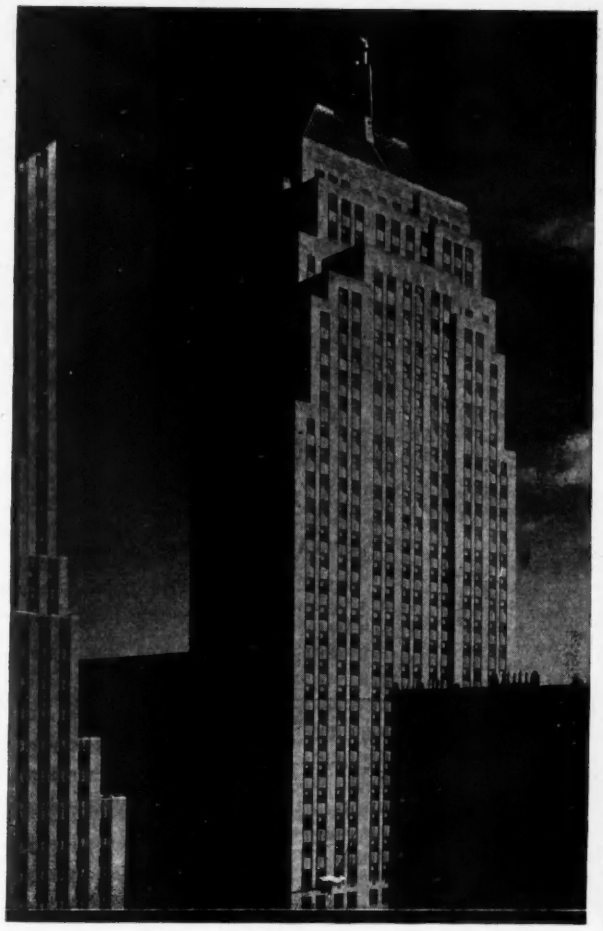

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latter class have been shut down for long periods.

Harrell-Davis' Prybl 1, NE NE SW Section 22-11n-3w, led the list of completions with an initial production of 1153 barrels in two hours, placing it among the larger of completions in the western portion of the section. Total depth is 6569 feet with seven-inch casing set at 6480 feet. Phillips Petroleum Company's Beaty 1, NW NW NW SE Section 22-11n-3w, 1192 barrels in 3½ hours producing through a four-inch choke from Wilcox sand at 6474 to 6565 feet. Gas was estimated at 17,000,000 cubic feet. The company's Dobson 1, NW NE NW SE of the same section, had Wilcox sand at 6449 to 6535 feet, from which it yielded 1685 barrels in two hours and 14 minutes and was making gas at the rate of 16,500,000 cubic feet. Initial production was taken through a six-inch choke. Phillips Petroleum Company took a new potential gauge on Highland 3, SE SW NE Section 10-11n-3w, which did 11,208 barrels in four hours, flowing through two 4½-inch chokes. Gas was estimated at 61,500,000 cubic feet.

Cement Pool Tests Will Revive Interest in Area

Chickasha, Okla.—The old Cement pool likely will again come into prominence with resumption of operations of John B. Nichlos et al's Rigney 1, NE NW SE Section 12-5n-9w. The test, formerly known as Rigney et al, was shut down in December, 1930, after setting eight-inch casing at 3000 feet and reaching a total depth of 3342 feet. After having the area rechecked by geologists Mr. Nichlos decided to resume operations with Wilcox sand the possible objective at 6500 to 7000 feet. It is located approximately five miles east and 1½ miles south of Mid-Kansas and Ramsey's Preston Culp 6, which set a new Oklahoma depth record at 10,079 feet last year.

Rigney 1 is on the East Cement Dome and Preston Culp 6 is on the west dome. It will afford geologists an excellent opportunity to check formations across the area and it may result in finding that the Preston Culp was not properly located with regard to subsurface structure, which still remains an unknown quantity. A condition similar to that at Healdton may be found. In that pool the producing formations lie upon and are draped over an old land mass which probably is as much or more responsible for structure as folding movements. Some geologists believe that a buried ridge may be found under the present Cement field and that a condition similar to Oklahoma City may be found, although the Pennsylvanian section found in Preston Culp 6 more nearly checks with the Southern Oklahoma type than with the Oklahoma City.

Court Will Not Open Kansas River Ownership Litigation

Topeka, Kans.—The United States Supreme Court has refused to revive litigation brought by land owners in the western part of Kansas regarding ownership of river bed land which the state had leased to Shell Petroleum Corporation. The decision gives to the state all Arkansas River bed lands and bears out the contention that all such land is property of the state. Suits for ownership of lands on other streams probably will follow. Owners of land adjacent to the stream had claimed riparian rights on the river bed as is the case on the north bank of Red River in Southern Oklahoma.

Storage in Oklahoma City Field Increased in October

Oklahoma City.—Although total production for October in the Oklahoma City pool exceeded pipe line runs by only 11,254 barrels, total stocks, due to various corrections, increased from 807,355 barrels, as of October 1, to 834,618 barrels, as of November 1. During the same period net overproduction changed from 500,238 barrels to 473,022 barrels, a decline of 27,216 barrels. As of November 1, 945 wells had an adjusted potential of 4,416,865.48 barrels, for an average well potential of 4673.93 barrels, being one-third of the 24-hour potential calculated on the basis of short time gauges. Potentials among the larger companies were as follows:

Phillips Petroleum Company, 94 wells, 1,036,986 barrels; Slick-Urschel, Incorporated, 118 wells, 701,392 barrels; Indian Territory Illuminating Oil Company, 310 wells, 616,710 barrels; Anderson-Prichard Oil Corporation, 30 wells, 160,698 barrels; Sinclair Prairie Oil Company, 68 wells, 111,228 barrels; and Skelly Oil Company, 24 wells, 107,351 barrels. Westgate Oil Company has the highest individual potential with an adjusted rating of 32,180 barrels, or 96,480 barrels, calculated on a 24-hour basis.

Leaving out wells belonging to Indian Territory Illuminating Oil Company, whose properties fall largely outside the Wilcox sand area, a recapitulation shows that 35.3 per cent of the wells have slightly more than 48 per cent of the potential.

Voshell Pool Percentage Cut By Addition of Wells

Wichita, Kansas.—Due to completion of several wells in the north and south ends of the deep sand horizon of the Voshell pool, it has become necessary to reduce allowable production from 60 to 50 per cent of potential, according to an announcement mailed producers on November 8. The umpire's report shows the pool to have a daily potential of 15,691 barrels, of which 1093 barrels are credited to 11 chat wells and 14,598 barrels to 99 so-called deep sand wells. Potentials are based on an open flow test taken between October 4 and 9, 1932. During the period October 1 to November 1, 1932, pipe line runs totaled 226,545 barrels, for a daily average of 7308 barrels. Normally the production has run slightly above 6000 barrels daily, the daily excess for the period being due to the taking of potentials.

Oklahoma Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
ATOKA COUNTY—		
Hicks et al, Norris 2, ne nw se 5-1n-15e	6	215
CARTER COUNTY—		
Noble Drlg. Co., Burton 2, se c nw 31-1s-2w	8 hrs. 252	2401
Page et al, Farland 2, cne sw sw 13-1s-3w	100	2414
COMANCHE COUNTY—		
Trowbridge-Chamberlain, Price 1, c sw nw ne 30-2n-9w	100	2110
CREEK COUNTY—		
Murta-Sherry & Carter, Mills 1-A, cnw se se 6-16-12e	15	2165
S. W. Anthony, Davis 1-A, ne c 9-16-12e	¶1½	1345
C. G. Tibbens, W. Sneed 8, cnl s½ ne nw 18-14-9e	35	1211
Sinclair Prairie, J. Emartha 1, sec nw 6-15-7e (owdd)	¶8-105	3704
Westfall Drlg., E. R. Jackson 1, se ne nw 3-18-8e	200	2650
Dean et al, Ger. Ard 1, es c nw 16-19-9e	*	2501
GARVIN COUNTY—		
Athey & Merrick, Derdyn 1, nec nw 20-1n-3w (owdd)	*	2340
JEFFERSON COUNTY—		
O. V. Beck, Seay 8, nw sw se 34-6s-5w	50	1584
E. S. Bonner, Burgess 1, nec se 12-5s-8w	*	709
MUSKOGEE COUNTY—		
W. B. Pine, Jackson 1, cse nw nw 17-13-16e	¶2	2054
H. L. Jolly, Spaulding 5, sw sw ne 8-15-18e	¶8-50	1614
J. P. Flanagan, Bemo 2, nw sw nw 9-15-18e (owdd)	¶5	1685
NOBLE COUNTY—		
Wentz et al, Wolff 1, cse nw 17-20-2w	1817	5225
OKFUSKEE COUNTY—		
J. L. Selby, L. Peter 1, nec nw 9-12-11e	¶¼	2350
OKLAHOMA COUNTY—		
Phillips Pet., Roberts 1, ne nw sw 15-11-3w	¶30-2011	6545
Phillips Pet. Head 1, sw se ne 22-11-3w	¶14-2774	6527
OKMULGEE COUNTY—		
Dulaney, Larney 1-A, se nw nw 28-15-14e	10	1668
Thompson & Jordan, Love 1-A, sw nw nw 12-14-12e	15	2719
Babcock, Harris 4, se sw nw 1-14-14e	*	1575
Greenley et al, McKinney 1-A, nw ne se 3-14-14e	*	773
OSAGE COUNTY—		
Pueblo Pet. 4, sw ne nw 14-21-8e	90	2253
PAWNEE COUNTY—		
Geraldine Oil, Bellis 1, swc se 6-20-9e	*	2400

Company, Well and Location	Initial Production Bbls.	Depth
Ray Spess, Tweedy 1-A, se ne nw 14-20-9e	*	2250
Moore et al, W. Purcell 1-A, cn½ nw se 28-21-8e	*	415
PONTOTOC COUNTY—		
Fleetborn, Norris 1, nec 28-5-6e (wdd)	80	....
POTTAWATOMIE COUNTY—		
Mid-Continent, Archer 5, cne sw se 14-6-3e	*	3594
SEMINOLE COUNTY—		
Tidal Oil, Lasley 6, cnw se se 19-9-6e (owdd)	*	2850
STEPHENS COUNTY—		
Pace et al, Caldwell 2, nw sw se 21-2s-7w	80	1721
Geo. Pace, Caldwell 3, sw nw sw se 21-2-7w	*	1970
Geo. Pace, Branch 3 sw sw se 1-2s-8w	*	....
Ruyle, Dare 1, ne se nw 1-2s-8w	10	1476
Curtis Oil, Dare 5, ne c se 2-2s-8w	20	1462
TULSA COUNTY—		
Superior Oil, Sanger 1-A, cel w½ se se 9-19-10e (twin)	10	836
WAGONER COUNTY—		
Bradley, Kernal 2, csw nw ne 7-15-17e	*	2065
J. K. Oil, Anderson 1, nec sw 19-17-17e	*	1260
La Piere, McIntosh 1, cwl sw sw 13-18-15e	*	1017

New Operations

ATOKA COUNTY—Dr. Barton, Miller 4, nw se sw 26-1n-14e.

CARTER COUNTY—Gant et al, Burton 2, nwc se 31-1s-2w; Noble Drlg. Co., Burton 3, cse ne nw 31-1s-2w.

COMANCHE COUNTY—Operators, Inc., Allen 2, ne sw sw 24-2n-10w.

CREEK COUNTY—Pipis, Lee 12, nw ne ne 12-18-11e; Sinclair Prairie, Emartha 2, nwc se 6-15-7e (owdd); Roach & McMurty, Luckey 1-A, se sw ne 28-16-9e; Johnson Oil Ref., K. Saab 1, sw nw ne 3-18-8e; Merritt et al, Pine 4, se ne ne 27-18-8e; Swift & Grimes, N. Hall 2, sw se se 4-19-9e. Correction: Smith et al, Baunsen 1, cnw se ne 3-18-8e, formerly reported as sw se ne.

HUGHES COUNTY—Boettcher et al, Jacobs 1, cne se se 9-7-8e; Mid-Continent, I. Harjo 2, cse ne se 9-7-8e; Pringle et al, 60 acres 1, swc 10-7-8e; Mid-Continent, D. Factor 1, nec se 15-7-8e.

JEFFERSON COUNTY—Bridwell, Barnett 1, nw sw ne 30-6s-5w; Beck, Seay 9, nw sw se 34-6s-5w.

KAY COUNTY—Crawford & Long, Richards 1, swc nw 4-25-1w.

KIOWA COUNTY—McWhirter, Vanderneck 1, ne c nw 3-7-19w (owdd.)

NOBLE COUNTY — Lucien Community Block, Jerome 1, csw sw 8-20-2w.

OKLAHOMA COUNTY—Helmerich-Payne, Ownby 1, nw nw se 22-11-3w. W. Franklin, Millers 1, se nw sw 35-12-3w.

OKMULGEE COUNTY—C. Smith, Rentie 13, cne sw sw 18-14-15e. C. W. Klingensmith, Farr 5, se ne nw 35-16-11e. Norfolk, Goodie 1, nw ne ne 19-16-14e.

OSAGE COUNTY—Moore Est. & Ohio, Osage 1-A, swc se 27-21-9e.

PAWNEE COUNTY—A. J. Bookout, L. Pierce 3, ne se sw 20-20-10e. Geraldine Oil, Edminston 9, nw nw sw 30-21-9e. Deep Rock et al, A. D. Krow 1, ne c se 26-23-5e.

PONTOTOC COUNTY—Benedum & Trees, Sterritt 1, csw nw sw 28-5-5e. Legon & Todd, Sterritt 3, cne se se 29-5-5e. Venson, Oliver 2, csw nw ne 32-5-7e (owdd). Venson, Oliver 4, se ne ne 32-5-7e.

POTTAWATOMIE COUNTY—Anderson et al, Zoeller 1-A, nwc sw (twin) 5-6-5e.

SEMINOLE COUNTY — Sinclair Prairie, Graham 1, nwc 10-9-5e (owdd). P&R, Jefferson 1, cne nw se 19-9-6e (owdd). Shell Pet., Hopper 5, swc ne 19-9-6e (owdd.)

STEPHENS COUNTY—H. Abels, Akers 6, ne ne nw 11-1n-5w.

TULSA COUNTY — Riverland, Inhofe 1-A, sw se ne 13-16-12e (twin). Mechlan, Nave 1, nw ne ne 25-18-15e. Kaufman, Johnson 1, sw se ne 22-18-15e.

Wildcat Drilling Report

(Wells shut down not included)

KAY COUNTY—Crawford & Long's Richards 1, sw nw 9-25-1w, sd 285 ft.

PAWNEE COUNTY—Deep Rock et al's Crow 1, ne se 26-23-5e, cellar.

NOBLE COUNTY—Lacy Rollins et al's F. Frank 1, se sw 6-20-2w, rig. Wentz et al's Wolff 1, cse nw 17-20-2w, pb 5225 ft and comp 1817 bbls. Stanolind-Amerada's Kolb 1, cne nw 33-20-2w, dr 685 ft.

CHEROKEE COUNTY—La Pierre et al's Woods 1, cse se 27-17-21e, td 1504 ft, d and a.

LOGAN COUNTY—Eason Oil's Gun Club 1, nw ne 10-16-4w, dr 5050 ft.

CREEK COUNTY—O. O. Owens' Fee 1, nwc 23-15-7e, sand 1206-54 ft, hfw, repairing engine.

OKLAHOMA COUNTY—Carter Oil et al's Shawbell 24, csw ne 1-12-4w, dr 4770 ft.

LINCOLN COUNTY — Sovereign et al's Flowers 1, sw se se 14-12-3e, dr 5134 ft.

SEMINOLE COUNTY—Donley et al's Shepard 1-B, se ne 4-8-8e, sd 1270 ft, show o and g.

PONTOTOC COUNTY—Blackwell O&G's Abbott 1, nw sw ne 14-4-6e, td 1040 ft, sd for orders. Sunray's Grant 1, cse ne 11-4-8e, sand 2680-2700 ft, hfw, td 2796 ft, sd for orders.

GRADY COUNTY — English Drlg. Co.'s Heenan-Coe 1, ne se ne 32-3-7w, pumping 15 bbls oil, 100 bbls water, may deepen.

PONTOTOC COUNTY—Williams' Kroth 1, ne se 33-3-4e, td 1543 ft, fsh tools. Delaney's Harden 1, ne sw 30-2-7e, dr 90 ft.

COAL COUNTY—Fink & Russell's Miller 1-A, se ne 10-2n-8e (owdd) dr 2715 ft. Dodd & Burton's Grigsby 1-A, nw se ne 35-1n-8e, rig.

ATOKA COUNTY—Barton et al's Miller 4, se nw se sw 26-1n-14e, sand 275 ft, td rng 6-in. Hicks Oil's Morris 2, se ne nw se 5-1-15e, sand 69-155 ft, est 2 bbls. Hicks Oil's Morris 2-A, se ne nw se 5-1-15e, sand 160 ft, td. George's Reddin 1, sw ne sw 19-1n-15e, sd 640 ft.

JEFFERSON COUNTY—Bridwell Oil's Wolghamuth 1, nw ne se nw 30-6s-5w, td 1485 ft, ru to pump.

MARSHALL COUNTY—Thomas et al's Setliff 1, sw se se sw 36-5s-6e, dr 200 ft. Lee Cross' Hamlin 1, se sw sw 26-6-5e, dr 355 ft.

STEPHENS COUNTY—California Prod. & Oper.'s L. Florence 1-A, ne nw se 11-3s-6w, sand 231-33 ft, td comp 2 mil gas. California Prod. & Oper.'s Garrett 1, se ne se 11-3s-6w, td 325 ft sd. California Prod. & Oper.'s Sitton 1, ne se sw 12-3w-6w, rig.

ATOKA COUNTY—Brookshire et al's Guinn 1, nwc 18-3s-10e, sd 3265 ft.

STEPHENS COUNTY — Gillette Bros.' Cooley 1-A, nw se nw 17-2s-8w, sd 580 ft.

ATOKA COUNTY—Malarnee et al's D. K. O. Land Co. 1, ce½ se 35-2s-13e, sd 704 ft, est 3 bbls, sd. Malarnee et al's D.K.O. Land 1, cse se 35-2s-13e, td 25 ft, sd.

How would you like to work in a California oil field?

It seems that the movie stars have invaded the California oil industry as indicated by the picture above which shows Ruth Stevens who has deserted the beach to inspect a nearby Lufkin installation and is caught in the act by a cameraman.

KANSAS FIELDS

First Well Showing for Commerical Production in Wilcox in Ritz-Decker-Garrett Area.

FLOYD SWINDELL, *Staff Representative, Tulsa, Oklahoma*

Wilcox Discovery at Ritz of Undetermined Importance

Wichita, Kans.—Palmer et al have made a discovery as yet of undetermined importance in Winn 3, SE SE NW Section 7-20s-1w, on the south end of the Ritz pool in McPherson County. The well originally was completed on February 3, 1932, producing initially 1278 barrels from Viola limestone at 3397 to 3405 feet. Drilling deeper found top of the Wilcox sand at 3438 feet and pay from 3440 to 3443 feet, the present total depth. Reports show 2750 feet of oil standing in the hole after 50 hours with no evidence of water. Preparations are being made to run a string of 2½-inch tubing to test.

Several outlying wells in the Ritz-Decker-Garrett area have found Wilcox sand or its equivalent but none have found commercial production in that formation. Even with the extensive development which has taken place during the past three years geological departments do not have a clear picture of the exact subsurface condition and it may be that Wilcox production will be found on the rims of those structures which are now fairly well defined.

O. B. Henry has announced location for No. 1, CSE SE Section 10-15s-7w, seven miles east of the town of Ellsworth and more than 16 miles from the nearest production in Ellsworth County. It is to be situated in the Barton Ellsworth Arch area which has yielded several apparently small pools and a large number of failures during the past two years.

Derby Oil Company is shut down for orders before standardizing Ploog 1, CNE NW SE Section 12-17s-10w, four locations south of the Company's Stratmann 1, which was completed February 8, 1932, producing initially 487 barrels in 12 hours from 3284 feet. Ploog 1 found top of the Arbuckle "Siliceous" lime at 3303 feet, pay at 3304 feet and stopped drilling at 3309 feet. No report has been made available as to size of the showing.

Reno County

Vernon, Shell et al were drilling below 3844 feet in shale in Tonn 1, CNW NW Section 17-25s-4w, originally completed on June 6, 1930, producing 197 barrels of oil at 3606 to 3611 feet. Production at this depth started cutting about 20 per cent water which prompted operators to seek deeper production. Base of the Mississippi limestone was found at 3842 feet and the test will go on to Viola limestone or deeper. It is located in southeastern Reno County, approximately 10 miles south of the Blake area.

Roy Ramsey was reported to be drilling below 2195 feet in School Lot 1, NW SW NW Section 32-19-9w, a small tract located in the center of a block owned by Gypsy Oil Company. Ramsey refuses to divulge information on the test, apparently due to a disagreement with Gypsy Oil Company, which did not want the test drilled at this time. It is understood that 10-inch casing was set at 2175 feet.

Kansas Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
COWLEY COUNTY—		
Roth et al, Brant 5, cne sw ne 12-32-4e	50	2594
Fern Oil, Gardehire 1, nw nw sw 22-32-4e	*	3350
Roth et al, Mancreat 7, ne nw se 22-32-4e	300	3275
Sinclair-Prairie, Dibbons 5, cse nw ne 22-32-4e	450	....
ELLSWORTH COUNTY—		
Walker Oil, Remley 1, csw se ne 23-14-7w	*	3610
Phillips Pet., Hochman 1, ne nw se 17-16-7w	*	3065
GREENWOOD COUNTY—		
Henderson-Holden, Hess 4, cnw se nw 34-22-11e	25	1943
Schull-Shell, Johnson 4, ce½ nw 16-24-12e	75	1600
HARVEY COUNTY—		
Frost et al, Martin 1, cne se se 19-22-3w	841	3308
KINGMAN COUNTY—		
Skelly Oil, Leisman 2, swc 20-27-10w	¶7-65	3448
MARION COUNTY—		
Youker, Melcher 1, csw se 20-18-4e	*	2690
McPHERSON COUNTY—		
Vernon Oil, Lewis 1, sec sw 26-19-2w (owdd)	130	3387
Manning & Terry, Steinbeck 1, nec se 34-19-2w	*	3430
Spencer et al, D. Neufeldt 1-A, cnw se se 16-21-3w	¶3-190	3100
All States Oil, Wall 2, sec sw 21-21-3w	17 hrs.-87	3132
SEDGWICK COUNTY—		
Continental Oil, Smith 2, se ne se 16/25-1e	45	2369
Gypsy Oil, Hamant 2, nwc sw 14-26-2e (owdd)	88	3370
Graham Bros., Rapp 1, ne c 21-26-2e	*	3243
Fisher-Lauck, Trustee 10, csw ne se 19-27-2e	55	2955
WOODSON COUNTY—		
Absher et al, 1, ne c 26-23-13e	15	1816

New Operations

COWLEY COUNTY—McKnabb, Forsythe 1, swc ne 11-32-4e; McKnab, Wilson 1, se c nw 11-32-4e. Roth et al, Smiley 2, cne se nw 12-32-4e; Roth et al, Graham 1, swc nw 14-32-4e.

ELK COUNTY—Denton, Snay 1, nw nw sw 28-28-12e.

ELLSWORTH COUNTY—Sinclair Prairie Jilka 1, cne ne 27-15-8w.

GREENWOOD COUNTY—McGinnes, Garrison 1, ne c se 32-24-12e. Downing, Reeser 1, cne se ne 7-24-12e. Kitzs-Hubbard, Bible 1, csw ne ne 28-24-12e. Lewis et al, Wright 1, sw se nw 36-24-12e. Lilly et al, Wilkerson 2, nw ne nw 7-25-9e. Gardner, Johnson 1, nw se nw 8-25-13e. Correction: York State, Wescott 13, cne nw 33-22-11e, formerly reported as cnl se ne nw. Correction: Theta Oil, Frankhouser 12, nw ne sw 23-22-12e, formerly reported as se sw sw.

HARVEY COUNTY—Hollow, Carter 1, csw se nw 17-22-3w. Frost et al, Martin 2, csl se ne se 19-22-3w. Phillips Pet., Warkentine 2, nw sw sw 20-22-3w.

McPHERSON COUNTY — Palmer-Phillips, Winn 2, se c nw 7-20-1w (owdd). Mabee-Shell, Klassen 1, nw c se 33-21-3w.

NESS COUNTY—Sinclair Prairie, J. Wilhelm 1, cnw sw 16-19-21w.

SUMNER COUNTY—Trees Oil et al, Thompson 1, swc 26-33-1e.

WOODSON COUNTY — Sheedy, Akins 1, nwc sw 19-25-14e.

Wildcat Drilling Report

(Wells shut down not included)

SUMNER COUNTY—Austin et al's Foy 1, sw se se 14-34-1w, dr 4050 ft.

COWLEY COUNTY—Roth and Faurot's Craig 1, se c 2-32-3e, sp 335 ft.

KINGMAN COUNTY—Panhandle Drlg.'s Wetherall 1, cse nw sw 20-28-10w, td 1610 ft, d and a.

SEDGWICK COUNTY—Cameron & Great Basin's Lansdon 1, cse nw 13-28-2e, td 3130 ft, rng 5-in.

PRATT COUNTY—Ninnescah O&G's Hardesty 1, sw se se 28-27-11w, td 3201 ft, ur 6-in.

BUTLER COUNTY—Ramsey's Michael 1, sw nw nw 18-27-3e, 6-in 2582 ft, sd 2920 ft.

RENO COUNTY—T. L. Johnson's Crotts 1, ne nw ne 27-26-10w, sp and sd.

FINNEY COUNTY—Joe Denham's Brown 1, csw 16-25-34w, sp 170 ft.

FORD COUNTY—Swaim et al's Henthorne 1, cnw 21-25-24w, t sil 5669 ft, dr 2735 ft.

EDWARDS COUNTY—Mid-Kansas' Converse 1, sw ne ne 30-24-18w, dr 5185 ft.

HARVEY COUNTY—Liggett et al's Davis 1, sw se ne 7-24-1e, td 3553 ft, fsh.

GREENWOOD COUNTY—York State's Joy 1, se c 11-23-11e, dr 400 ft.

MARION COUNTY—Darby et al's Pankratz 1, nw se 5-20-1e, t Viola 3287 ft, ur 6-in.

NESS COUNTY—Sinclair-Prairie's Wilhelm 1, csw sw 16-19-21w, rig.

BARTON COUNTY—Skelton et al's Ott 1, cse se 16-19-14w, td 3605 ft, sd.

RICE COUNTY—Ramsey et al's School lot 1, nw sw nw 32-19-9w, td 2195 ft, ur 10-in.

McPHERSON COUNTY—Aldrich et al's Stromquist 1, sw se se 2-19-3w, lcn. Bailey-Carlson et al's Carlson 1, se c 4-19-3w, td 2825 ft, ur 8-in. Swartz et al's Benson 1, nw ne se 12-19-3w, lcn. Whan et al's Nelson 1, nw se 18-19-2w, lcn.

MARION COUNTY—Vernon-United Pet.'s Schmidt 1, sw nw 35-19-1e, dr 1775 ft, 10-in 1370 ft. Farrell et al's Williamson 1, cwn se 21-19-4e, sd 1015 ft.

BARTON COUNTY—Smith, Ash et al's Wilson 1, c nw sw 13-18-14w, td 2665 ft, rng 8-in. Ranken et al's Sooey 1, csw ne 34-18-12w, rig.

BARTON COUNTY—Sinclair-Prairie's Turgeon 1, cne nw 3-16-12e, ru.

ELLSWORTH COUNTY—Bribb et al's Horousi 1, sw se ne 17-16-10w, lcn.

MORRIS COUNTY—Phillips Pet's Hochman 1, ne nw se 17-16-7w, td 3065 ft, d and a.

ELLSWORTH COUNTY—Raymond Gear & Hannah's Kroboth 1, se nw 12-15-10w, skid rig 17 ft south, sp new hole.

ELLSWORTH COUNTY—Bickford's Burke 1, cnw sw 14-14-9w, sp 50 ft and sd. Gurley Bros. & Barnsdall's Union Pacific 1, nw sw 7-14-7w, td 2135 ft, ur 10-in. Walker Oil's Remley 1, sw se ne 23-14-7w, td 3610 ft, d and a.

GRAHAM COUNTY—Schleimeyer et al's Smith 1, se c 24-8-25w, 8-in 3615 ft, c o td 3615 ft.

NORTH and WEST TEXAS

Humble Pays Big Price for World-Powell Lease, Seen as Forerunner of Test to Ordovician Formation.

H. H. KING, *Staff Representative, Fort Worth, Texas*

Royalty Owners Keep Hobb Operators Drilling

Hobbs, New Mexico.—Operation of eight to 12 rotary rigs in the Hobbs field has been averaged for several months as result of royalty owners having prodded the lease owners into continuing development on undrilled proven units, and also along the edge of the north portion of the structure. The trend of production to the northwest is considered wide open for important extensions, and this section is scheduled to support a sizeable drilling campaign over long period, as royalty owners, including the state, are demanding exploration work.

Humble Oil & Refining Company added a producer to the field on an inside location last week in completing Bowers 1-B with a potential rating of 12,000 barrels daily from regular lime at 4080-4221 feet. Rotary has been rigged up to drill a second test on this small tract.

This revival of development work in the field is cutting down the revenue derived from the older wells, as the allowable production has remained constant at 25,000 barrels daily for more than three months while the number of wells increase.

The only important wildcat drilling in southeastern New Mexico is Western Drilling & Engineering Company's State 1, Section 13-17s-36s, which is making good progress below 4450 feet after passing up a show of gas at 3440 feet. A string of 8¼-inch pipe was cemented at 3465 feet as result of this minor gas strike.

Crockett County Deep Test Indicated By Lease Deal

San Angelo, Texas.—The forerunner of an Ordovician lime test in the World-Powell field, Crockett County, is indicated by Humble Oil & Refining Company's payment of $200,000 cash for royalty interest under about 8000 acres of the L. P. Powell ranch. A portion of the royalty is yielding revenue from stripper wells in the 2500-foot lime horizon, as the entire field is averaging about 1200 barrels daily on pump. Development of this horizon has been at a standstill for months, with little encouragement in the way of flush production to justify more drilling. However, the area is believed to offer possibilities of production in the Ordovician lime formation to be found near the 8000-foot level, and such a possibility is the basis for the above deal, although no immediate tests of the Ordovician is planned.

A thorough test of the Ordovician formation on the Todd ranch in Crockett County is soon to be made by Stanolind Oil & Gas Company and unit members' Todd 1, which is drilling with rotary in shale at 6580 feet. Streaks of lime are beginning to appear in recovered cores, indicating the approach of a change in formations. This wildcat has a surface elevation of 2660 feet, and is the most important wildcat drilling in West Texas. More than $300,000 for leases and royalties have been expended by companies and individuals in general vicinity of the above unit test.

Gray County Test Expected To Be Big Producer

Pampa, Texas.—An exceptionally large producer for western Gray County is expected upon completion of A. J. Graham-G. B. Cree and B. L. Hoover's J. B. Barrett-Skelly 1, which blew in last week making 20 barrels of high gravity oil hourly and wet gas at rate of 15,000,000 cubic feet daily from top of granite wash formation at 3130 feet with 882 feet of open hole. This well has apparently picked up the contact point, or dividing line between the granite wash and lime formations, and a heavy flow of oil and gas usually accompanies such strikes. It is located on 80 acres farmed out by Skelly Oil Company in SWc N½ NE Section 130, Block 3, I&GN Ry. Survey, being a half-mile from nearest production to east and west. The hole was cased with 8¼-inch pipe at 2248 feet, and a string of 6⅝-inch pipe will be cemented above the oil horizon. Taconian Oil Company's Robt. Sullivan 1, located several miles to the northwest of the above well, scored a potential rating of 9792 barrels daily at 2998 feet in September, 1930, after encountering the contact point of the two pay formations.

Conceded to be a failure at 2880 feet, Sid Richardson et al's J. E. Wright-Gulf 1 failed to show more than a trace of oil after topping the granite wash formation at 2842 feet, with a surface elevation of 2858 feet, and will continue to a water horizon. This test is a northeast outpost for the west Le-Fors or Finley-Wright-Worley pool, Gray County. It is located in SWc NW Section 12, Block 3, I&GN Ry. Survey, and on 160 acres sold by Gulf Production Company for an oil payment.

The lime horizon on the south end of the Bowers-Jackson pool, Gray County, assumed greater importance when The Texas Company's Wm. Jackson 2-B, SEc SE Section 94, Block "B-2" H&GN Ry. Survey, flowed at rate of 500 barrels of oil daily after shot of 120 quarts at 2963-3013 feet, having plugged back from granite wash formation logged at 3085-3180 feet to 3020 feet. It has a surface elevation of 3153 feet. Saulsbury et al's Davidson 1, an east offset made a 160-barrel pumper after shot in the same lime horizon several months ago, and revived interest in this dolomite lime producing area.

Texas Academy of Science Holds Session at Houston

Houston, Texas. — Members of the Houston Geological Society, together with those of the Houston Philosophical Society and other Houston scientific societies attended meetings of the Texas Academy of Science in Houston November 11 and 12. These various societies together participated on the evening of November 11 in a dinner at the Houston Club, following which there was an address by President H. Y. Benedict of the University of Texas, head of the Texas Academy, and a lecture by Dr. Altenburg of Rice Institute on "Genetic Views on the Origin of Life."

North and West Texas Field Developments

Completions

WEST CENTRAL TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
BROWN COUNTY—		
Young Bros. & Alexander, Kilgore 5	*	1260
CALLAHAN COUNTY—		
Matson Drl. Co., Radford 2-A.....	*	432
Woodley Pet. Co., Radford 24.....	5	403
COLEMAN COUNTY—		
Gibson et al, Stevens 1.....	*	2203
PALO PINTO COUNTY—		
Brazos River Gas Co., Bridges 3...	*	1530
SHACKELFORD COUNTY—		
Edwards et al, McCassland 3.....	10	723
Lowe & Delaney, A. Alexander 4, 1¼ mil ft gas and.....	10	855
Tannehill Oil Co., Newell-Mobley 32	10	957

NORTH TEXAS

ARCHER COUNTY—		
H. L. Gross et al, Nichols-Mahler 1	*	703
Houston & Houston, P. Browning 9	6	461
King & Krahenbuhl, Ray 1	150	1127&
Ike Lyons et al, P. Browning 1....	*	460
C. C. Williams et al, Matlock 1.....	15	695
BAYLOR COUNTY—		
Star Drlg. Co., Potrwood 1	*	1512½
JACK COUNTY—		
Alexander & Wallace, Mullins 1....	*	753

(Continued on next page)

Company, Well and Location	Initial Production Bbls.	Depth
MONTAGUE COUNTY—		
Bridwell Oil Co., Tucker 3	125	1248
WICHITA COUNTY—		
Mogren & Anderson, Goetze 30	35	908
Murbach & Holmberg, Harvey-Gardner 1	*	2732
E. H. Pigg et al, Case 1	*	1938
John L. Swanner et al, Williams-Parker 7-B	*	1312
Schlaffke & Blair, Jacobie 1	*	1100
Turman Oil Co., Waggoner 23	*	1053
F. E. Van Wormer et al, Cochran 5	115	800
Fisher 10	25	760
A. T. Wolfe et al, E. Daume 8	10	755
YOUNG COUNTY—		
Bray et al, Casey 1	*	625
G. G. Browning et al, Howard 1	*	735
Cable Oil Co., Snider 26	*	665
Clarco Oil Co., Marshall 2	125	3668
Henry Craig et al, Olney City 1, sec. 230	*	1051
Darian et al, Belknap 1	15	712
Iron Mountain Oil Co., Keen 1	*	603
Tatum 13, sec. 1908	30	663
Tatum 14, sec. 1908	*	676
Young County Lumber Co. 1	*	603
Jacob O&G Co., Thedford 1	*	3777
Kleiner & Riggs, Larimore 11, sec. 22	20	701
Mook-Tex Oil Co., Bullock 1, sec. 61	*	1009
Slick Estate & Roeser-Pendleton, Jeffreys 1	*	4092
United Producers Co., Larimore 6	10	999
H. J. Whittaker et al, Harmon 2	*	603
PANHANDLE		
GRAY COUNTY—		
Magnolia Pet. Co., Fee 6	*	4070
Travis et al, L. H. Webb 2-B	200	2495
HUTCHINSON COUNTY—		
Canadian River Gas Co., Dunnaway 2-A	¶32½	2770
ROBERTS COUNTY—		
Travis et al, Cunningham 1	*	2690
WEST TEXAS		
GLASSCOCK COUNTY—		
Phillips Pet. Co., T. W. Baker 1	1500	2127
HOWARD COUNTY—		
Sinclair Prairie Oil Co., G. M. Dodge 3	150	2800
PECOS COUNTY—		
Stanolind Oil & Gas Co., Toborg-Dixie 6	2	356
WARD COUNTY—		
J. C. Maxwell et al, E. Brillhart-Gulf 1 5 mil ft gas and	95	2513
UPTON COUNTY—		
Harry Baldwin-Hope Pet. Co., J. F. Lane 2	130	2315

Atlantic Increases Line Capacity Out of East Texas

Tyler, Texas.—The capacity of Atlantic Pipe Line Company's 10-inch trunk line, extending from the East Texas oil field to tanker terminals at Atreco, near Beaumont, has been increased to 30,000 barrels daily as result of the completion of an intermediate mainline station at Zavalla, Angelina County. This station is equipped with motor driven centrifugal pumps, having two diesel engine driven electric generating units for power source. The company has been getting by with only one station in service on its 181½-mile line, but increased volume of oil movement made it necessary to put an intermediate station in service. The line has been operating since October, 1931.

EAST CENTRAL TEXAS

Judges Withholding Final Decision on East Texas Proration Suits Pending Enactment of New Law.

H. H. KING, *Staff Representative, Fort Worth, Texas*

Freestone County Renewing Bid for Woodbine Production

Tyler, Texas.—Maintaining a drilling pace seldomed equaled by wildcat operations in the East Texas district, the Anderson County wildcat test of W. H. "Bill" Roeser, Roeser-Pendleton, Inc., and others on the J. B. Hanks 105-acre tract, Anderson County School Land Survey, had reached a depth of 4240 feet on the morning of November 9. This test was spudded on November 2, and should be coring for the Woodbine sand before the close of the week. More than 800 feet of hole was made on the last day reported on. Service Drilling & Royalty Corporation, Shreveport, has the contract, and is using a heavy rotary. Hanks 1 logged Pecan and Austin chalk horizons about normal with other tests drilled near the block of acreage, but actual markers have been withheld. It has a surface elevation of 449 feet.

Freestone County has renewed its bid for a share of interest in wildcat activity in the Woodbine sand belt through a test being drilled by W. A. "Bill" Reiter, Neversuch Oil Company, (J. K. Hughes) and others in the southeast corner of the O. Burleson 202-acre tract, Wiley Carter survey, Abstract 115. Burleson 1 logged top of Austin chalk at 2825 feet, and had drilled past 2940 feet late last week. It is located on a secondary fault zone to the east of the Mexia-Wortham fault, and about four miles southeast of Streetman. A show of oil encountered in broken Woodbine sand at 3630-53 feet, with a surface elevation of 320 feet by E. L. Smith Oil Company's Emily Jackson 1, in July, 1931, was largely responsible for the drilling of the above test to the west.

H. H. Myers et al of Tyler have shown faith in the claims made as to the recovery of an oil saturated sand core at 3711-19 feet (corrected) from their Henderson County wildcat on the M. E. Olson 80-acre tract, George Wilson Survey, by cementing a string of 6⅝-inch pipe at 3701 feet. This test is about two miles south of Brownsboro. It has a surface elevation of 512 feet.

Elimination of Fred Shields, Florence Oil Company et al's wildcat test on the W. Buchner 40-acres, J. E. Davis Survey, near New Salem, Rusk County, was virtually conceded when a depth of 4100 feet was reached without encountering sand. The top of the Austin chalk was placed at 4035 feet, with a surface elevation of 418 feet. This was considered a very important test for southwestern Rusk County in view of it exploring a faulted structure against the east shore line of the Sabine Basin.

East Texas Sets Record for Individual Operators

Tyler, Texas.—Difficulties encountered by the state's enforcement officers in upholding proration orders in the East Texas oil field can be more fully appreciated when consideration is given the fact that there are 955 separate companies, partnerships and individuals actually operating one or more producing leases. Never before in the history of the oil business have so many different interests congregated in a single field to make a determined stand for a profit on their leasehold regardless of the size of the tracts undergoing development, or the price paid for same. Actually there are now more participants in the field's production, as the above count was taken from the records of the Railroad Commission's proration division as of October 1.

It is within reason to forecast that the total number of separate operating units will pass the 1000 mark, as the continued sub-division of leases creates opportunities for newcomers to acquire a drilling site, or a lease of fair size and launch a drilling program.

A checkup on the number of separate producing leases in the field as of October 1, reveals that a total of 2558 were then contributing production, while this number has since been augmented by a score, or more. The total completed oil wells in the field is in excess of 8800, and quite certain to exceed 10,000 within a few months, with additions averaging from 90 to 100 each week for several months.

Small Initial Production More Common in East Texas

Tyler, Texas.—More numerous exceptions to the usual large wells among the weekly quota of completions in the East Texas oil field, where production is supposed to be limited to 40 barrels daily regardless of well potentials, appeared on the completion report for the past week. Wells drilling into water, failing to flow and one that gives promise of being dry although in so-called proven territory were scattered between the extreme ends of the field, but in each instance near the edge of production.

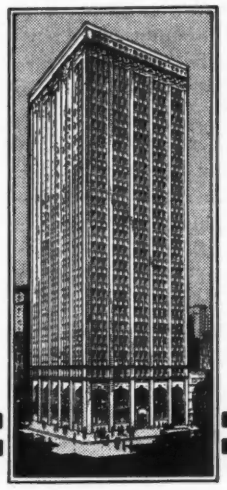
Poor sand conditions encountered on the south end of the field by Stanolind Oil & Gas Company's J. W. Ashby 1, located in northwest corner of 100-acre lease, Mary Walker survey, lessened the prospects of production although considered virtually proven for oil or gas. This test cored at 3715-18 feet, and recovered about 18-inches of sand, but it is considered close to bottom hole water, as it has a sub-sea depth of 3320 feet. A minor fishing job delayed a drill stem test, which was ordered before running pipe to make a production test.

Simms Oil Company and Frank Buttram's W. R. Nicholson 14, located near center of 800-acre lease on the northwest edge of the field, Upshur County, encountered salt water when Woodbine sand was tested at 3679-3682 feet. The hole has a sub-sea depth of 3314 feet, and has been pronounced as a failure, but will be deepened for geological information. The Texas Company's Jim Williams 2, located on the north line of the above tract and in the southeast corner of 93-acre lease, J. Crouch survey, flowed 200 barrels daily by heads via open tubing from sand at 3692-3701 feet. This well has a sub-sea depth of 3318 feet. It is a likely candidate for a position on the field's water well report.

Stroube & Stroube's R. J. Mackey-Humble 1, located in the southeast corner of 320-acre lease, D. Reed Survey, Upshur County, and near the north end of the field, flowed 1200 barrels of salt water daily when given first production test in sand at 3579-3600 feet, having a sub-sea depth of 3316 feet. It was plugged back to 3590 feet, or 3306 feet below sea level, and completed with an initial flow of 60 barrels of pipe line oil hourly via open 1¼-inch tubing. A split joint of five-inch casing made it necessary to cement three-inch pipe at 3564 feet.

The salt water level in the Woodbine horizon in the northwest corner of the F. Cordova Survey, Rusk County, was accurately determined when Gaddy H. Vaughn et al's W. O. Alford 5, located in westerly southwest corner of 80-acre lease, topped oil sand at 3735 feet and drilled into salt water at 3790-3795 feet. The well was drilled to a sub-sea depth of 3360 feet, and plugged back to 3737 feet, or 3302 feet below sea level, according to the owner. It scored an initial flow of 100 barrels of pipe line oil hourly via open tubing after plugging back.

Invasion of doubtful territory on the west edge of production in northern Rusk County by John G. Menke of Wichita Falls and others promised a minor extension for production in the W. R. Cooke Survey as result of the recovery of saturated sand at a sub-sea depth of 3316 feet in the southeast corner of the C. F. Bradberry 46.81-acre lease. Sun Oil Company farmed out this lease for 1/16 over-riding royalty, and also gave 40-acres out of the northeast corner of its W. D. Tucker 306½-



Greetings to the A.P.I.

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acre lease, P. W. Holmes Survey, to the above parties on the same basis. On the opposite side of the field, Travis et al's J. F. Horton 1, located in southwest corner of lease in J. C. Barnett Survey farmed out by Shell Petroleum Corporation, failed to flow when tested in broken sand at 3489-3539 feet. Swabbing test rated the well at 35 barrels daily. It has a surface elevation of 347 feet, and 5 3/16-inch casing was cemented at 3422 feet. George Glover et al over-stepped the eastern limits of production in drilling Clarke Dickson 1, located on nine-acre lease, S. Baggett Survey, Gregg County, and finished with a dry hole at 3567 feet.

Hunt Production Company added two more pumpers to its long list of wells requiring such means of making their allowable in the Joiner area last week. R. J. Vinson 4, J. Darley Survey, pumped 12 barrels hourly at 3616-3733 feet, and D. M. Bradford 3-D pumped eight harrels hourly at 3538-3630 feet.

Producers Get Bills From Humble for Storage

Tyler, Texas.—Invoices demanding payment promptly in cash the sum of 12 cents per barrel, covering one month storage charge and field gathering charges, are being mailed by Humble Pipe Line Company to all outside well connections affected by Humble Oil & Refining Company's storage and part-payment crude purchasing plan in the East Texas field, Panhandle, North and West Central Texas districts. Some operators, questioning the veracity of the company's claim that it is actually performing the storage service covered by its invoices, have demanded that the company produce an affidavit giving proof that the oil is in storage. Some well owners, having the available cash have recognized the due bill and are paying off, while others have elected to ignore the demand for lack of funds, or through having confidence that their accumulated storage oil will not be sold to the highest bidder on the court house steps at Houston through default.

This unusual procedure had its beginning when Humble Oil & Refining Company adopted a pay half and store half policy with outside connections in the above areas for September 12 to 15, inclusive. The buying policy was altered effective 7 a.m. September 16 in the above areas to increase purchases to 6 per cent of the proration allowable, with the remainder going to storage for the account of the producer, subject to storage and field gathering charges. Royalty oil from leases operated by Humble Oil & Refining Company was placed on the same basis until October 29, when the company announced that it would then settle in full for all accumulated royalty, with the storage charges waived. It is reported that the wording of lease contract under which many of the leases were taken was primarily the cause of royalty oil payments being made in full, else suits for the termination of leases may have occurred later.

Temple, Texas.—Issuance of the three-judge federal court decree declaring Texas proration laws invalid will be postponed until the present legislature has drawn up a new proration law, it was indicated this week by Federal Judge Randolph Bryant, following requests of attorneys for both sides in the suit.

In addition to withholding 40 per cent of the purchase price for oil accepted in the above areas and charging for storage, Humble Oil & Refining Company has not met the price advance adopted by the majority of the major buyers on October 15. The company's price for East Texas crude is 98 cents per barrel, or 12 cents per barrel below the top price posted.

The 10 cents gathering charge included with the first monthly storage tariff sent to East Texas well owners represents cost sustained by Humble Pipe Line Company after usual pipe line deductions for shrinkage, etc. in transporting the oil from lease tanks to its nearest trunk line, or tank farm.

Foot notes on a typical invoice requests that in making settlement for the charges that the name of the field involved be given along with check. It also states that the cancelled check will serve as receipt.

Assuming that Humble Oil & Refining Company will not advance its price for East Texas crude above its present level of 98 cents, the oil taken for storage from other lease owners automatically dropped in value to 86 cents per barrel at the end of the first 30 days of storage, and then storage charges pile up at rate of two cents per barrel monthly. The crude market situation in the field is such that operators can not switch from the above company to other majors, all of whom pay in full for all oil accepted, as the latter are reported to be booked up to requirements, and above in some instances. The only alternative is then to line up with so-called "distressed price" market outlets offered by local refiners and crude brokers supplying distant plants and foreign markets, particularly France.

Mid-Kansas Delivering Oil To Atlantic on Exchange

Tyler, Texas.—Delivery of 500,000 barrels, or more, of East Texas crude by the Mid-Kansas Oil & Gas Company, subsidiary of Ohio Oil Company, to Atlantic Refining Company at minimum rate of 5000 barrels daily began November 8 as part of a consideration of a trade involving Arkansas and Louisiana properties. Illinois Pipe Line Company is gathering the oil as produced, and has built 3¾ miles of four-inch line to the east from its field station on the R. G. Mason tract, Joiner section, to connect with Atlantic Pipe Line Company's 10-inch trunk line to tidewater terminals at Atreco, near Beaumont. Atlantic Oil Producing Company recently sold its interests in producing properties, pipe lines, storage tanks, gasoline plant and about 280,000 barrels of stored oil in the Stephens and Haynesville fields to Ohio Oil Company. The latter obtained badly needed crude market relief in the East Texas field for Mid-Kansas Oil & Gas Company, owner of 236 wells, over a period of 100 days, or more, as result of the above deal.

East Texas Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
JOINER AREA—		
Ajo Oil Corp., Joe Lee (25-ac) 1-B	9200	3793
American-Liberty Oil Co., I. L. Kinney (336-ac) 15	5500	3650
L. J. Pinkston (86-ac) 6-A	8400	3700
Belrice Oil Co., C. Young (40-ac) 3	9600	3703
E. L. Chapman (Dave Donoghue, Rec.), A. Johnson (20-ac) 2	9500	3796
Combined Oil Interests, G. W. Eaton 12	7500	3790
M. A. Corbin & Culp, E. B. Alford 1	9000	3659
H. C. Culp et al, S. Clay (5-ac) 1	2500	3698
J. R. Gaskey et al, A. R. Alford (85/100-ac) 1	8000	3735
Golden Eagle Oil Co., L. S. Sartain (5-ac) 1	*	3850
Hyde & Rogerson, Barton-Birdwell 1	2500	3794
Humble O&R Co., J. R. Box (125-ac) 9	8000	3730
W. L. Price (206½-ac) 19	13,000	3756
R. E. L. Silvey (240-ac) 12-A	8500	3734
F. F. Wooster (50-ac) 4	5500	3789
Hunt Production Co., D. M. Bradford (226-ac) 3-D	200	3630
J. R. Vinson (59-ac) 4-A	300	3733
Kimble & J. C. Acre, E. B. Alford 1	500	3665
K.O.T. Oil Co., S. S. Cook (10-ac) 2	7200	3721
Mid-Kansas O&G Co., M. M. Cross (814-ac) 45	8000	3646
R. G. Mason (104-ac) 7	2500	3696
Rogers et al, M. A. Thrash (4-ac) 1	6500	3767
The Texas Co., Allen Kersh (211-ac) 10	5500	3627
Tidal Oil Co., M. H. Hale 2-A	1000	3674
L. J. Pinkston (135-ac) 10	5000	3740
Graddy H. Vaughn et al, W. O. Alford (80-ac) 5	6000	3795
KILGORE AREA—		
Jack Berry (was A. G. Deck) et al, Grif Davis (4-ac) 2	9000	3654
Blue Star Oil Co., Sabine River 3-J, Tr No. 3	9000	3550
Sabine River 6-I, Tr No. 6	9400	3532
Sabine River 6-J, Tr No. 6	9400	3535
Sabine River 7-E, Tr No. 7	10,000	3503
Champlin & Bass, Inc., J. B. Watson (22½-ac) 5	9500	3605
W. H. Dixon et al, J. C. Clayborn 1	7500	3714

Geo. Glover et al, Clark Dickson
(9-ac) 1 ..... * 3567
Gulf Prod. Co., M. B. Hughey
(50-ac) 6 .....9600 3534
W. Oten (48-ac) 1 .....7000 3732
A. Spear 19 .....9000 3574
Humble O&R Co., L. D. Crim 25..12,000 3624
L. D. Crim (564-ac) 63.....10,000 3588
S. S. Laird (568-ac) 20-B.....4000 3625
Mary E. Minor (123-ac) 5.....9000 3689
Ben Peterson (50-ac) 3.....8500 3654
Henry Sexton 10-B 8400 3698
Island Oil Co., R. D. Register
(39-ac) 3 .....9000 3647
Koberg Oil Co., L. Martin-Atlantic
(25-ac) 5 .....8500 3682
T. W. Lee et al, School Lot 1.....6000 3727
Magnolia Pet. Co., A. Hicks
(99-ac) 9 .....11,000 3693
Mead Oil Co., I&GN Ry.
(7½-ac) 4 .....4500 3580
Pelican Nat'l Gas Co., A. Spear-
Laird (92-ac) 7 .....9000 3659
Rhoads Drl. Co., Sabine River 1,
Tr No. 4 .....7200 3551
Ruston Drl. Co., Sabine River 1,
Tr No. 3.....13,000 3553
Shell Pet. Corp., M. H. Bivins
(114-ac) 7-A 9000 3633
W. W. Elder (196-ac) 12 .....11,000 3625
B. F. Laird (211-ac) 11-A.....8500 3461
J. B. Watson (285-ac) 21.....10,000 3583
Sinclair Prairie Oil Co., J. E.
Lawther (317-ac) 11 .....10,000 3560
Sun Oil Co.-Texas Seaboard Oil Co.,
Campbell (107-ac) 9.....9600 3552
Tidal Oil Co., E. R. D. Bivins
(200-ac) 15 .....9000 3624
Wheelock & Collins, D. Wills
(220-ac) 11 .....9500 3667
Fox Wood et al, L. Morse (6-ac) 2 11,000 3690
LONGVIEW AREA—
Atlantic Oil Prod. Co., McBee
Fisher (65-ac) 8 .....10,000 3495
J. C. Judge (65-ac) 32-B.....12,000 3526
Columbia O&G Co., G. A. Castle-
berry (14-ac) 1 ..... 150 3724
Conservative Oil Co., B. Victory
(100-ac) 8 .....7000 3688
Drilling & Exploration Co.-W. L.
Pickens, Cox-Hamon 1.....11,000 3535
Gulf Prod. Co., A. V. Bacle
(69-ac) 11 .....11,500 3606
Humble O&G Co., A. L. Hughes
(92-ac) 8 .....9600 3630
G. W. Johnson (102-ac) 8.....9400 3712
H. M. Lawrence (100-ac) 9....10,000 3652
J. H. Sheppard (57-ac) 4-A 8000 3666
A. J. Watkins (76-ac) 5.....10,000 3667
C. A. Lester & Duffield, J. Moore-
Shell (66-ac) 2 .....8400 3580
Magnolia Pet. Co., N. W. Black-
well (90-ac) 6 .....9500 3683
W. R. Nicholson (50-ac) 3.....9600 3656
O. F. Smith (97-ac) 7.....10,000 3633
H. B. Ziegler (120-ac) 10.....13,000 3491
J. H. Massie et al, W. R. Orr
(36-ac) 6 .....13,500 3629
Selby O&G Co., Snavely (351-ac)
14-B 7000 3570
Shell Pet. Corp., J. W. Akin
(100-ac) 6 .....9500 3616
T. B. Stinchcomb (94-ac) 7.....11,000 3468
Sinclair Prairie Oil Co., J. W. Akin
(100-ac) 8-B 8000 3575
Stroube & Stroube, R. J. Mackey-
Humble (320-ac) 1 .....1500 3600
Stanolind O&G Co.-Simms Oil Co.,
Flewellen (374-ac) 21-B.....6500 3704
Percy McGeorge, (100-ac) 7,...15,000 3480
Stanolind-Simms-Continental Oil Co.,
Flewellen (400-ac) 9-C.....7200 3738
Sun Oil Co., J. T. Loden
(100-ac) 7 .....9500 3677
J. J. Reppond (50-ac) 4.....8000 3685
M. C. Satterwhite (82.7-ac) 8....6500 3646
E. C. Shoults (100-ac) 5.....10,000 3680
The Texas Co., T. W. Lee
(210-ac) 9 .....12,000 3567
Jim Williams (93-ac) 2..... 205 3701
Tidal Oil Co., J. J. Castleberry
(202-ac) 15 ..... 300 3605
Lake Devernia (270-ac) 21 .....12,000 3541
Yount-Lee Oil Co., T. W. Lee
(35-ac) 2-B 6500 3573
VAN FIELD—
Pure Oil Co., A. R. Humphreys
(100-ac) 4 ..... 65 2946
H. P. Tunnell (131½-ac) 4 ..... 30 2941

East Texas Field Developments

Company, Well and Location	Initial Production Bbls.	Depth
HENDERSON COUNTY—		
Dr. J. T. Kennen (Sunny South Oil Co.), Rowe-Baker 1	*	920
KAUFMAN COUNTY—		
Geo. Anderson & M. Grubb, W. W. Moody 1	*	3880
UPSHUR COUNTY—		
J. P. Evans et al, W. E. Bell 1....	*	3946

Wildcat Drilling Report

(Wells shut down not included)

ANDERSON COUNTY—W. H. "Bill" Roeser et al's J. B. Hanks 1, Anderson School Lands sur, elev 449 ft, top Pecan chalk about 3095 ft, dr 3850 ft.

BOWIE COUNTY—Roy E. Anderson et al's A. Y. Breckenridge (464-ac) 1, M. Dykes sur, elev 352 ft, top Nacatoch 775 ft, top Saratoga chalk 1180 ft, Pecan chalk 1362-1805 ft, sd for cas to test show oil 2810 ft. Tom Bell-W. J. Dobbs & Fred S. O'Neill's Mrs. T. M. Moss (465-ac) 1, O. D. Watson sur, rig. W. S. Langford et al's W. W. Whybark (100-ac) 1, J. H. Dyer sur, elev 377 ft, sd 2240 ft.

CASS COUNTY—Texon Oil Co.'s C. W. Kessler (125-ac) 1, H. Haas sur, materials. Lapan-Lovejoy et al's S. A. Orr (320-ac) 1, G. W. Morris sur, dk.

CHEROKEE COUNTY — Barclay-Taite & Deason's A. T. O'Neal (13-ac) 1, J. M. Procella sur, dk. Bridges-Chandler et al's Berryman (300-ac) 1, H. Kimble-Dean sur, elev 399 ft, sd 1000 ft. L. J. Hopcroft & A. L. Vandeventer's J. R. Taylor (200-ac) 1, L. M. Doherty sur, materials. Saranac Oil Co.'s P. E. Jones (132-ac) 1, J. D. Hamilton sur, rig. Wilson-Stubbs Oil Corp.'s M. F. Ragsdale (53-ac) 1, J. P. Wolfin sur, elev 520 ft, sd 3600 ft.

FRANKLIN COUNTY—Franco Oil Co. (J. F. Mills-L. S. Harper-A. P. McGee's) L. S. Harper (118-ac) 1, W. N. Dawson sur, elev 356 ft, top Pecan chalk 1320 ft, co and washing 3404 ft.

FREESTONE COUNTY—Clyde Creighton & Co.'s W. A. Holley (80-ac) 1, A. B. & M. sur, Abst. 61, top Pecan chalk 3105 ft, sd 3670 ft. W. A. Reiter-J. K. Hughes-E. L. Smith Oil Co.'s D. H. Burleson (233.2-ac) 1, Wiley Carter sur A-115, dr shale 2297 ft.

HENDERSON COUNTY—B. L. Green et al (was J. M. Roger's) M. H. Gossett (103-ac) 1, L. D. Stover sur, Abst. 87, elev 341 ft, top Taylor 1450 ft, top Austin chalk 2347 ft, top Woodbine sand 3267 ft, sd 3328 ft. Dr. J. F. Kennon (Sunny South Oil Co.'s) Rowe-Baker 1, J. T. Childress sur, dry and abn 920 ft. H. H. Myers et al's M. E. Olson (80-ac) 1, Geo. Wilson sur, elev 512 ft, top Pecan chalk 3070-3245 ft, cem 6⅝ inch cas after reporting oil sand 3661-69 ft.

HILL COUNTY—T. J. Spikes et al's M. H. Davis (55-ac) 1, J. R. Alexander sur, Austin chalk 727-1030 ft, dr 1348 ft.

HOPKINS COUNTY—Burgess & Simpson's Mt. Vernon Nat'l Bank 1, M. E. & P. Ry. sur, elev 385 ft, dr 1210 ft. Columbia O&G Co.-K. L. McHenry-Lechner & Hubbard's W. J. McLeod (85-ac) 1, (east) D. Holbrook sur, elev 485 ft, Pecan chalk 1258-1397 ft, top Austin chalk 2070 ft, dr 3010 ft. Harmony Oil Co. (J. F. Roark's) J. L. Taylor (88-ac) 1, John Polk sur, sd 540 ft.

HUNT COUNTY—Arthur Kelsey et al's W. R. Terry (139-ac) 1, Jas. Roads sur, lcn.

KAUFMAN COUNTY—Geo. H. Anderson-Maurice Grubb et al's W. W. Moody (308-ac) 1, H. G. Hider sur, elev 510 ft, Austin chalk 2377-2580 ft, top Woodbine series about 3200 ft, top Eagleford shale 2626 ft, top red beds 3481 ft, dry and abn 3880 ft. Paul L. Meaders & Milhoan Drilling Co.'s T. C. Coleman (259-ac) 1, W. G. Gibbard sur, sd 1120 ft. Tom Nash et al's Mrs. C. H. Gardner (6-ac) 1, E. A. Ferguson sur, lcn. J. M. Scott-Stanley Darrill et al's S. Pannill (649-ac) 1, A. Cherino sur, sd 2346 ft.

LEON COUNTY—Leon County Oil Co.'s John Morris (200-ac) 1-A, A. F. McWhorter sur, sd 2540 ft. Shell Pet. Corp.-J. R. Black-Penn Oil Co. et al's Wm. Phillips (160-ac) 1, E. A. Swayze sur, elev 423 ft, Pecan chalk 4135-4181 ft, Austin chalk 4841-5570 ft, dr black shale 5934 ft. John P. Sheffler & Allday's W. R. Thompson (197-ac) 1, N. M. Allen sur, sd 2175 ft.

MORRIS COUNTY — Buchanan-Burkhalter et al's Staggers (65-ac) 1, Forbes & Nelson sur, elev 370 ft, hard Pecan chalk 2526-3020 ft, Austin chalk 3483-3506 ft, sd 3692 ft, to cem 3½-inch cas to test reported saturated sand. Grover Hart et al's Walcott-Lott (577-ac) 1, D. A. Russell sur, cem cas 150 ft. C. M. Joiner Pet. Corp.-Harris Drlg. Co.'s C. D. Brown 1, Wm. Coffey sur, dk.

RED RIVER COUNTY—Concord Oil Co.'s J. R. Dellahunty 1, I. Moore sur, dr shale 2705 ft. L. G. Priest et al's R. W. Peek (220-ac) 1, Abram Wagley sur, lcn.

RUSK COUNTY—T. E. Castle et al's R. H. Gary (50-ac) 1, J. Latham sur, top Pecan chalk 2678 ft, top Austin chalk 3480 ft, top Georgetown lime 3672 ft, sd 3812 ft. John Keegans et al's R. L. Needham 1, J. H. Chambers sur, sd 1415 ft. R. H. Lemmon & A. F. Richardson's Motley-H. Wood (498-ac) 1, J. I. Sanches sur, lcn. Fred W. Shields & Florence Oil Co.'s W. Buckner (40-ac) 1, John E. Davis sur, elev 418 ft, Pecan chalk 3220-3590 ft, top Austin chalk 4012 ft, or 4053 ft, dr chalk 4186 ft.

SMITH COUNTY—Mundt & Mount's Murrty (65-ac) 1, Marshall University sur, elev 579 ft, Navarro 2858-79 ft, Pecan chalk 3496-4000 ft, top Austin 4436 ft, fsh 4630 ft. McRobie et al's C. P. Hamilton (259½-ac) 1, J. Rector sur, sp and sd. J. O. Allen et al's Fee 1, M. J. Henriquez sur, lcn.

UPSHUR COUNTY—J. P. Evans et al's W. E. Bell-Amerada (63-ac) 1, Wm. McFadden sur, elev 413 ft, Pecan chalk 2254-2640 ft, base Austin chalk 3459 ft, top Woodbine sand showing salt water 3525 ft, dry and abn in Georgetown lime 3944-46 ft. F. W. Maddox et al's D. A. Fleet (1-ac) 1, C. H. Cooper sur, dr chalk 2750 ft. Cranfill-Reynolds et al's Berry (340-ac) 1, J. P. Hutchinson sur, dr 1020 ft. Newsom & Orr (was B. L. Watson's) D. F. Smith 1, J. R. Davis sur, sd 1865 ft. Tucker & Van Fleck's S. J. Mangham (564-ac) 1, J. J. Hooper sur, cem cas 113 ft. J. K. Wadley-Evans & C. Lyons' W. S. Jones (100-ac) 1, Jas. M. Dunn sur, elev 263 ft, top broken chalk 2333 ft, hard chalk 2402-2977 ft, top Austin chalk 3557 ft, cored sw sand 3680-81 ft, sd for cas to test oil sand 3686-3696 ft.

VAN ZANDT COUNTY—Daisy O&G Co.'s Mrs. C. A. Browning (100-ac) 1, J. P. Tackett-Bell sur, Pecan chalk 2109-2230 ft, top Austin chalk 3160 ft, sd 3290 ft. Gardner Bros. & Roy C. Ling's J. Leonard (53½-ac) 1, Phillip Mason sur, elev 511 ft, Pecan chalk 2340-2410 ft, Austin chalk 3475-3781 ft, top Woodbine sand 4240 ft, top lower Cretaceous 4927 ft, top Georgetown 3950 ft, fsh 5472 ft. A. C. Roan et al's W. E. Price (7-ac) 1, J. Walling sur, Pecan chalk 1680-1895 ft, Austin chalk 2595-2770 ft, sd 2942 ft.

WOOD COUNTY—DeGenther & F. H. Zeigen et al's M. L. McClain (66-ac) 1, Sam Brooks sur, elev 455 ft, Pecan chalk 2553-2740 ft, sd 3845 ft. Hudson-Shelton & Talko Pet. Corp.'s C. S. Ross (86-ac) 1, F. L. Smith sur, elev 359 ft, top Pecan chalk 2892 ft, sd 3825 ft. Hull & Sharp (was W. B. Saulsbury's) et al, T. H. Peterson (320-ac) 1, W. B. McNutt sur, Abst. 418, dr 1335 ft. F. B. Parriott & J. S. Hanlon's J. H. Harvey (was Stuart) (1964-ac) 1, M. H. Ussery sur, elev 604 ft, cem surface cas and sd. Wood County O&G Co.'s Guy Davis 1, John R. Clute sur, dr shale 3680 ft. D. Replogle & Sinclair Prairie Oil Co.'s John C. Saner 1, Blk. 19, Jas. M. Candler sur, lcn.

East Texas Border Counties

Wildcat Drilling Report

(Wells shut down not included)

HARRISON COUNTY—Great Eastern Oil Co., W. L. Rudd 1, Wm. Steele sur, tested sw and est 1 mil ft gas 965 ft, dr 1240 ft. Ryan Cons. Pet. Corp., Furrh 1, F. O'Neal sur, wo cas, td 5100 ft.

MARION COUNTY—Baunauch Dev. Co., Miller 1, H. Fulgram sur, sr 4498 ft. Starling & Preston, Henderson 1, R. Bennington sur, dr 1600 ft. Green, Smitherman et al, Lindsay 1, Alex Albright sur, owdd, td 2380 ft. Wroe-Nichols, Henderson 1, Geo. Bledsoe sur, dr 3500 ft.

Texas Permits

ARCHER COUNTY—Kimmell & Woofter, Wichita Falls, G. Williams, 40, 11, J. Hand sur, 260 ft se of No. 4.

BEE COUNTY—Wallace & Bowles, Houston, J. P. Harris, 10, 1, S 13, Uranga sur, 150 ft from n and 250 ft from e li Blk 12. United Prod. Corp., Houston, G. A. Ray, 44, S. Morris sur, nw corner.

BAYLOR COUNTY—Star Drilling Co., Wichita Falls, W. H. Portwood, 40, 1, 1281 TE&L sur, 150 ft from w and 750 ft from s line.

BROOKS COUNTY—F. A. East, Edinburg, O. Garcia, 2161, 2, Sh. A, La Encantada sur, ne corner.

BROWN COUNTY—E. H. & F. M. Caldwell, Brownwood, J. D. Caldwell, 80, 4, KCSL sur, 300 ft n of No. 3.

CALLAHAN COUNTY—Hathaway & Ask, Abilene, A. T. Abler, 80, 5, S 32, D&D Asy. sur, 150 ft from s and 460 ft from e line. W. F. Snebold, Fort Worth, L. J. Cook, 100, 1, S 303, SP Ry. sur, 1270 ft from w and 900 ft from s line.

CHAMBERS COUNTY—Texas Gulf Prod. Co., Houston, Kirby, 22, H12, H. Griffith sur, 982 ft from ne and 65 ft from se line. D. B. McDaniel, Houston, Wilburn, 10, 6, H. Griffith sur, sw of No. 5.

COLEMAN COUNTY—Fox & Adams, Burkett, W. T. Burns, 920, 59, No. 168 A. Wickson sur, 750 ft from n and 595 ft from e line.

CLAY COUNTY — Alexander & Wallace, Wichita Falls, D. M. Snedecker, 280, 1, 2623 TE&L sur, 150 ft from n and w lines. D. M. Henry, Wichita Falls, D. Fry, 100, 1, 2638 TE&L sur, 150 ft from n and w lines.

DUVAL COUNTY—Jno. F. Camp, San Antonio, A. Weil, 1600, 3, S 566, M. Rogers sur, 200 ft from n and 691 ft from w li sw¼. Magnolia Pet. Co., Dallas, A. A. Brodbeck, 20, 2, S 44, J. Poitevent sur, 330 ft from s and w lines. Texas Co., Houston, H. Wendt, 122, 1, S 42, W. N. Seago sur, 330 ft from s and e lines. L. Capps, Houston, J. E. Williams, 480, 14, S 7, B 1, ACH&B sur, 330 ft from n and w li of sec.

EASTLAND COUNTY—Russell & Herring, Ranger, C. E. Allen, 100, 1, T. A. Howell sur, 1150 ft from e and 908 ft from s line.

FORT BEND COUNTY—Texas Co., Houston, R. A. Wolters, 100, 3, S. Kennedy sur, 300 ft from e and 1050 ft from s line.

GREGG COUNTY—Pilot Oil Co., Dallas, E. Hoyt, 21, 1, J. Moseley sur, 330 ft e of center of w line. Rancho Oil Co., Fort Worth, Wm. Wheeler, 9, 2, D. Ferguson sur, nw corner. Sells Pet. Co., Muskogee, Okla., R. Fisher, 63, 5, W. G. Painter sur, 660 ft s of No. 1. W. D. Corbin, Longview, J. M. Farrell, 21, 1, D. Sanchez sur, 330 ft from n and w lines. Jones-O'Brien, Inc., Shreveport, La., J. Protho, 8½, 2, Jno. Blair sur, 123 ft from n and 679 ft from w line. Arkansas Producing Co., Longview, I. Adkins, 9, 3, D. Dainwood sur, 868 ft s of No. 4; 4, 330 ft from n and 56 ft from e line. Faith Oil Corp., Wichita Falls, J. C. Barrett, 140, 2, B. W. Witcher sur, 1260 ft from n and 330 ft from w line; 3, 200 ft from n and 330 ft from w line. Welch & Sandler, Kansas City, Mo., R. T. Barnett, 107, 6, T. Johnson sur, 262 ft w of center of e line. Imperator Oil Co., Dallas, J. King, 2, 1, W. P. Chisum sur, 126 ft from n and 138 ft from e line. Atlantic Oil Prod. Co., Dallas, P. McGeorge, 40, 5, McAnally sur, 614 ft from e and 330 ft from s line; W. P. Duncan, 155, 12, D. Ferguson sur, 330 ft from s and e lines. Gulf Prod. Co., Houston, G. W. Culver, 208, 16, M. Van Winkle sur, 330 ft from s and w lines. Humble Oil & Ref. Co., Houston, G. W. Willingham, 100, 7, D. Sanchez sur, 330 ft from s and w lines; A. Carter, 90, X-10, D. Ferguson sur, 158 ft from w and 559 ft from s line. Sun Oil Co., Dallas, E. S. Smith, 57, 3, M. Scott sur, 330 ft from n and e lines. Shell Pet. Corp., Dallas, W. W. Elder, 196, 16, J. S. Caruthers sur, 660 ft nw of No. 1; M. T. Cole, 120, 7, T. Johnson sur, n offset to Rhoads No. 3. Mag. Pet. Co., Dallas, A. Hicks, 99, 10, D. Dainwood sur, 150 ft from n and 105 ft from w line. Texas Co., Houston, E. M. Woods, 90, 7, M. Dillard sur, 330 ft from w and 188 ft from s line.

GRAY COUNTY — C. E. Christy, Wichita Falls, E. E. Gethering, 160, 2, S 13, B 9A, H&GN sur, 330 ft from n and e lines. Texas Co., Wichita Falls, J. E. Williams, 480, 14, S 7, B 1, ACH&B sur, 330 ft from n and w lines of sec. Bell Oil & Gas Co., Pampa, Webb, 40, 2, S 61, B 25, H&GN sur, 330 ft from s and w li ne¼ nw¼.

GLASSCOCK COUNTY — Phillips Pet. Corp., Bartlesville, Okla., T. W. Baker, 80, 2, S 20, B 33, T&P sur, 338 ft from n and 335 ft from w line. Shell Pet. Corp., Dallas, H. Phillips, 80, 2, S 23, B 33, T&P sur, 990 ft from w and 330 ft from s line.

GUADALUPE COUNTY — H. A. Suttle, San Antonio, O. J. Halm, 331, 2, J. Kent sur, 150 ft from n and 1400 ft from e line.

HARDIN COUNTY—Barrett & Robshun, Saratoga, SW Lbr. Co., 3719, 1, B. H. Hawkins sur, center of survey.

HARRIS COUNTY—Newton & Lillie, Goose Creek, W. Hunt, 50, 1, 180 ft s of center of n line.

HUTCHINSON COUNTY — J. M. Huber Pet. Co., Borger, Crudgington, 420, 1, S 7, B Y2, TT Ry. sur, 2475 ft from s and 660 ft from e line.

JEFFERSON CONUTY—Lowrie & Young, Houston, G. W. Junker, 130, 1, W. H. Smith sur, 1806 ft from n and 413 ft from n line.

MATAGORDA COUNTY—Humble Oil & Ref. Co., Houston, Pierce Est., 4003, 1, I. Foster sur, 330 ft from nw and ne lines.

MONTGOMERY COUNTY — Abercrombie-Harrison Oil Co., Houston, Alexander, 100, 1, J. McHorse sur, 304 ft from n and 550 ft from w line. Humble Oil & Ref. Co., Houston, O. L. Alexander, D. 50, 1, J. McHorse sur, 267 ft from n and 577 ft from w line; O. L. Alexander, E, 20, 1, J. McHorse sur, 594 ft from n and 360 ft from w line; So. Tex. Dev., 320, 27, T. C. Howell sur, 933 ft sw of 14.

NUECES COUNTY—L. W. Capps, Hous-

GREETINGS

to Delegates and Visitors *to the*

AMERICAN PETROLEUM INSTITUTE

Convention in Houston, Nov. 15, 16 and 17

United Gas Public Service Company

United Production Corporation

UNITS OF THE

UNITED GAS SYSTEM

ton, W. S. Hutchins, 80, 1, S 416, G. Frank sur, 330 ft from s and e lines.

PALO PINTO COUNTY—Hoffman & Page, Eastland, S. B. Strawn, 12, 1, Strawn sur, 140 ft from s and 361 ft from e line. Brazos River Gas Co., Mineral Wells, H. Harrison, 90, 3, R. Clark sur, sw corner.

POLK COUNTY—Dick Schwab, Houston, Davis Holmes, 1000, 2, A. Viesca sur, 376 ft from e and 425 ft from s line.

RUSK COUNTY—Maxin Wilson, Overton, Fee, 1½, 1, J. Lindley sur, 50 ft from e and 154 ft from s line. Marr Drilling Co., Tyler, J. Rettig, 95, 2, J. H. Sparks sur, 330 ft from n and w lines. East Texas Oil Ref. Co., Dallas, A. Givens, 20, 4, R. W. Smith sur, 390 ft w of No. 2. C. H. Lyons, Shreveport, La., W. P. Moore 1, M. V. Pena sur, 330 ft from w and 276 ft from s line. C. P. Oil Co., Henderson, A. Thrash, 9, 3, M. J. Pru sur, 187 ft from e and 150 ft from s line. Humble Oil & Ref. Co., Houston, J. E. Wheelis, 168, 12, F. Cordova sur, 350 ft from e and 3679 ft from s line; Jno. Bell, 60, 6, S. P. Hollingsworth sur, 1075 ft from w and 330 ft from s line; L. D. Crim, 907, 61, E. G. Sevier sur, 330 ft from e and 2531 ft from s line; S. S. Laird, B, 568, 24, M. Van Winkle sur, 660 ft se of No. 8; I. W. Wooley, 200, 12, F. Cordova sur, 990 ft from n and w lines; S. A. Plowman, A, 228, 16, F. Cordova sur, 1670 ft from w and 1200 ft from s line; A. D. Blackwell, A, 325, 16, F. Cordova sur, 1469 ft from w and 1923 ft from n line; 15, 330 ft from n and 1060 ft from e line; I. W. Wooley, 201, 11, F. Cordova sur, 1079 ft from n and 330 ft from e line; F. F. Wooster, 61, 5, W. H. Bears sur, 350 ft from w and 387 ft from s line; R. A. Barksdale, B, 119, 1, T. J. Martin sur, 330 ft from n and w lines. Gulf Prod. Co., Houston, W. Shaw, 43, 3, F. Cordova sur, 330 ft from n and w lines; J. W. Shaw, 89, 6, F. Cordova sur, 598 ft sw of No. 2. Devonian Oil Co., Tulsa, Okla., J. Alford, 99, 8, S. P. Hollingsworth sur, 330 ft from ne and 608 ft from s line. Sinclair Prairie Oil Co., Fort Worth, P. Tipps, A, 123, 12, B. F. Poindexter sur, 3190 ft from e and 330 ft from n line. Sun Oil Co., Dallas, Schuyler, B, 72, 5, J. B. Cadena sur, 410 ft sw of No. 2. Mid-Kansas Oil & Gas Co., Shreveport, La., M. Kangera, 105, 5, P. Tipps sur, 843 ft se of No. 6. Texas Co., Shreveport, La., W. W. Henry, 229, 11, W. J. Roan sur, 761 ft e of 10; 12, 761 ft e of No. 11; A. W. Kersh, 211, 11, E. B. Foulks sur, 700 ft n of No. 10.

STARR COUNTY—Goodwin & Yantis, McAllen, Seabury, 80, 1, S 5, Por. 75, 150 ft from n and e lines. J. W. Seward, La Feria, F. Dawson, 20, 1, B 6, Sh. 3B, Por. 70, 495 ft from w and 240 ft from s line.

UPSHUR COUNTY — L. W. Tarkenton, Gladewater, W. H. Allen, 40, 1, L. Gonzales sur, 330 ft from s and e lines. Waggoner & McConnell, Tyler, J. Williams, 100, 3, McKinney-Williams sur, 330 ft from n and w lines; 4, 330 ft e of center of w line; 5, 330 ft from n and e lines. Simms Oil Co., Dallas, W. R. Nicholson, 800, 14, M. Mann sur, 1320 ft from n and 2020 ft from e line. Solar Exploration Co., Ardmore, Okla., S. J. Maughan, 80, 1, J. J. Hooper sur, 660 ft from n and 330 ft from w line. B. H. Rogers, Oklahoma City, Okla., E. H. Brawley, 56, 3, McKinney-Williams sur, 330 ft from w and 254 ft from s line; 4, 330 ft from n and 248 ft from e line.

UPTON COUNTY — Gulf Prod. Co., Fort Worth, McElroy, 640, 10, S 196, B F, CCSD &RGNG sur, 1320 ft from s and e lines of sec.

VICTORIA COUNTY—Texas Co., Houston, A. M. McFadden, 5, J. A. McFaddin sur, 300 ft from s and 1300 ft from e li of survey.

WASHINGTON COUNTY—Clay Creek Oil Corp., Brenham, Wm. Arndt, 84, 1, J. F. Perry sur, 240 ft from w and 160 ft from s line.

WICHITA COUNTY—Geo. Proctor, Wichita Falls, Honaker, 40, 9, C&M No. 1 sur, 150 ft from w and 278 ft from s line. A. T. Wolfe, Wichita Falls, A. Daume, 42, 9, S. P. Ry. sur, 300 ft w of No. 8. S. H. Walton, Wichita Falls, Gulf, 70, 3, S 23, B 5, H&GN sur, 1128 ft from e and 20 ft from n line. Geo. Proctor, Wichita Falls, J. B. Honaker, 40, 10, B 1, C&M sur, South of No. 3.

WILBARGER COUNTY—Texas Co., Wichita Falls, W. T. Waggoner, A, 407, S 7, B 13, H&TC sur, 400 ft n of No. 403.

ZAPATA COUNTY—Texas Co., Houston, Jennings, 15, C. Blanco sur, 1000 ft ne of 13.

SOUTH TEXAS

Suits Filed Against Violators of Proration; Western Limit of Tuleta Defined; Dozen Rigs in Shallow Pool.

EARL POST, *Staff Representative, San Antonio*

Humble's O'Conner Ranch Test Indicates New Sand

San Antonio, Texas.—Either a new sand or a new pool is expected to be established in northeastern Refugio County on the O'Conner ranch as a result of showings encountered by Humble Oil & Refining Company. O'Conner 3 topped a horizon at 3136-43 feet that showed 700 feet of oil in 2½ minutes on a drill stem test. Cored to 3148 feet, or 12 feet in the sand, it developed 3100 feet of oil in a 10-minute test. Casing has been set and the well will be completed within a few days. The well is in the F. Rios survey.

This well is at the extreme southwest end of a series of tests drilled through the McFadden-O'Conner strike running through Refugio and Victoria Counties, where a number of oil and gas producing horizons have been found to as deep as 6000 feet. No important oil wells, however, have been finished in this field, if it can be classed as a single field.

O'Conner 1, John Keating survey, topped a sand at 4127 feet and drilled to 4155, where it showed an initial flow of 750 barrels through 5/16-inch choke. It was shut in for some time and when reopened, salt water broke in and was never cut off. The well was deepened to 5972 feet, where it was temporarily abandoned.

O'Conner 2, same survey as 1, was drilled to 5765 feet, failing to show production in the 4100-foot level. It was plugged back to 2300 feet and completed as a large gasser. The location of the O'Conner 2 is 933 feet north and 75 degrees west of the O'Conner 1.

For comparison, a gas sand was encountered at 2300-9 feet in O'Conner 1, which tested 800 pounds pressure in three minutes on a three eighths choke; O'Conner 2, sand 2232-40 feet, 1000 pounds pressure in three minutes, three eighths choke; O'Conner 3, 2237-61 feet, show for large gasser.

O'Conner 1 had a sand at 3126-46 feet, which tested salt water, which likely is the same level from which the new well is finding its oil showing.

In the old Refugio field, Hewitt and Doherty completed M. F. Lambert 1 as a 600-barrel well through quarter-inch choke. It has a total depth of 6518 feet. Casing is set at 6457 feet, below which 20 feet of screen has been run. It is the first producer in the field in many weeks.

Humble Oil & Refining Company abandoned Peter Rydolph 1, Kemper survey, farther northeast along the McFadden trend, at a total depth of 6962 feet, despite the fact that it made a large gasser spraying a small amount of oil from 5185-5200 feet.

In the Keeran field, Cullen & West have derrick up for Keeran 2; Gulf Production Company et al is spudding Keeran 3; Union Oil Company is drilling at 3600 feet in Keeran 2. All are in the M de Leon survey.

Still farther north in the Beck area, Houston Oil Company et al have reached 2700 feet and are drilling W. T. Beck 2, located on Lot D, Ry No. 26 survey.

Two Producers Contribute 100 Barrels to Escobas

San Antonio, Texas.—Two producers accounted for 100 barrels more production in the north end of Escobas field, Zapata County. The Texas Company's Jennings 14, Cerrito Blanco Grant, 420 feet southwest No. 8, is making 60 barrels from 1205 feet. Trevino Oil Corporation's I. G. Trevino 17-A, 300 feet southwest of No. 16-A, in Section 65, Block 5, is producing 40 barrels from 1214 feet.

North Government Wells Field Extended Southwest

San Antonio, Texas.—Further extensions and large wells featured activity in the North Government Wells field, Duval County, during the week.

The most outstanding well was W. P. Luse et al's C. W. Hahl 1-B, which flowed 40 barrels an hour through choke from 2287-2301 feet. The elevation is 531 feet, ground. The well is one-fourth mile west and one-half mile south of any production and makes the southwestern portion of the field look promising. The well is in NWc NE SE Section 45.

At the north end of the field, one location was added in a northerly direction by The Texas Company's H. Wendt 1, in the southeast corner of the north 122.75

acres of Section 42. The well topped the sand at 2227 feet, drilled in about 20 feet and showed an initial flow of 90 barrels an hour on choke.

A number of other good producers were reported in the main field during the week, none of which, however, indicated any extensions. The present extensions will be factors in bringing about offset campaigns in the proven field.

Completions Due Soon In Active Los Olmos Field

San Antonio, Texas.—Much activity is reported in the shallow Los Olmos field of Starr County with fully a dozen rigs running, and a number of completions due within the next several days.

Los Olmos Oil & Gas Company's Kelsey Bass 27 has casing set on top of the sand at 467 feet; Kelsey Bass 28 is drilling at 368 feet and Kelsey Bass 29 is repairing rig at 259 feet. All are in Section 7.

Sinclair-Culberson are waiting on cement at 432 feet in Kelsey Bass 1, Section 5; Warner Doyno's Seabury George and Taylor 1, Share 5, is preparing to drill in at 389 feet; Hornaday and Porter's Kelsey Bass 1, Section 7, is drilling out plugs at 458 feet; Keck and Keane's Kelsey Bass 1, Section 6, is a 2,000,000 cubic foot gasser at 334-6 feet. In addition, a number of locations have been made and several wells spudded.

Salt Water Well Narrows Limits of Tuleta Field

San Antonio, Texas.—The western boundary of the Tuleta field, Bee County, was narrowed last week by Dirks Brothers' Fee 1, which showed salt water at 4145 feet, after topping the sand at 4109 feet. The majority of the horizon was reported dry, although several streaks of oil were reported. The lower part of the sand was salt water. This well is 165 feet from the south and east corners of the tract in Section 3, one-half mile west of The Texas Company's Cox 1.

Two other tests are being started in the field. Wallace and Bowles have located Harris 1 in Section 13 and have derrick up. O'Neill and Howeth are spudding Harris 1, also in Section 13.

In the North Pettus field, United Production Company is coring at 3640 feet in George Ray 44, south offset to Gulf Coast Oil Company's McKinney 3.

San Antonio, Texas.—The Texas Company's A. E. Dowdy 2 is a 264-barrel producer from seven feet in the Edwards lime, topped at 2560 feet. The well is in Jacob Darst Survey, Darst Creek field, Guadalupe County. It pumped 110 barrels the first 10 hours. This is the first completion in the field in months.

Several Saxet Field Wells Expect to Reach Sand Soon

San Antonio, Texas.—No completions were reported from the Saxet field, Nueces County, although several wells are expecting to pick up producing sands at most any time. Gulf Coast Oil Company's Bessie Elder 2, an old gasser at 2742 feet, is being deepened. It is coring at 4539 feet. At 4552-62 feet, Houston Oil Company encountered a gas sand in W. W. Walton 1, Section 9. It is drilling and still in the sand. The remainder of the wells are drilling above 3000 feet or are just getting started.

State Asks Penalties For Excessive Production

Henderson, Texas.—Injunctions were granted during the past week against five independents and one major oil company restraining them from producing in excess of the per well allowable in East Texas field, and at the same time penalty suits were filed against them, the state asking $1000 per day for the period of violation of production rules, that is, for each day wells of the defendants were allowed to produce in excess of 40 barrels each.

Those named as defendants in the suits, which were filed in the district courts of Rusk and Gregg Counties, were: Ajo Oil Corporation, Dallas; Sam Brachman, Fort Worth; Dimham Oil Corporation, Shreveport, Louisiana; Waggoner and McConnell Agency, Gladewater; Marfinwood Oil Company, Corsicana; and Humble Oil & Refining Company, Houston.

Texarkana, Ark.—Langford and Fox's Coleman Brothers 1, SE SE Section 25-16-25, a wildcat in LaFayette County, Southwest Arkansas, is drilling below 1975 feet, after logging Nacatosh sand at 1385 feet; elevation is 225 feet.

Southwest Texas Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
DUVAL COUNTY—		
Al Buchanan et al, Foster 1, sur 268	*	2329
Hamill & Hamill, C. W. Hahl 3, sec 42	720	2313
La Jita Corp., Weil 3, sec 566	*	2653
W. P. Luse et al, C. W. Hahl 1-B, sec 45	980	2301
Mag Pet. Co., G. Wendt 11, sec 44	720	2326
Plymouth Oil Co., W. K. Hoffman 1, sec 113	*	3512
Texas Co., M. B. Johnson 3, sec 42	720	2260
H. Wendt 1, sec 42	2260	2246
GONZALES COUNTY—		
Kirby Pet. Co., C. B. Bouldin 1, R. Ward sur	*	4895
Luling O&G Co., DuBose 2, F. R. Whitner sur	*	2994
GUADALUPE COUNTY—		
Texas Co., A. E. Dowdy 2, Jacob Darst sur	264	2567
REFUGIO COUNTY—		
Hewitt & Doherty, M. F. Lambert 1	600	6518
STARR COUNTY—		
Keck & Keane, Kelsey Bass 1, sec 6	¶2	336
VICTORIA COUNTY—		
Humble O&R Co., P. Rydolph, Kemper sur	*	6962
ZAPATA COUNTY—		
Texas Co., Jennings 14, Cerrito Blanco sur	60	1205
Trevino Oil Corp., I. G. Trevino 17-A, sec 65, blk 5	40	1214

Wildcat Drilling Report

(Wells shut down not included)

BASTROP COUNTY—American Liberty Oil Co.'s L. Davis 1, G. N. Stovall sur, move on. Marts & Beavens' Smith 1, J. Burleson sur, prep to sp. Ogden & Reed's Miears 1, W. M. Leach sur, sp. P. H. Wilson's R. M. Randle 1, Bernard Bymer sur, sp.

BEE COUNTY—Dirks Bros.' Fee 1, sec 3, Tuleta, sand 4109-12 ft, test dry. Gulf Coast Oil Co.'s Hicks Hall 5, blk 2, Uranga sur, Normanna, set 405 ft sur cas, re-dr. B. Mauldin's J. L. Mauldin 3, George Kerr sur, Pettus, lcn. Nichols & Bruner's Hedefels 1, John Ryan sur, 3½ mi se Beeville, wash down 2100 ft to re-dr. O'Neill & Howeth's J. P. Harris 1, blk 13, sec 13, Tuleta, ru. United Prod. Co.'s Geo. Ray 44, N. Pettus, dr 1600 ft. Wallace & Bowles' J. P. Harris 1, Sec. 13, Tuleta, dk.

BEXAR COUNTY — Eckert & Son's L. Brehm 3, Boquar sur, coring abr 620 ft; Brehm 4, Boquar sur, lcn. Robert C. Hill's F. Schell 1, sec 234, Perretaux sur, dr 850 ft. R. V. Hill's M. & A. Boeck 1, J. F. Shepherd sur No. 314, dr 300 ft. Johnson Bros.' Elsie Janszen 1, J. Montez sur, ru. E. M. Jordan et al's V. A. Petty 1, I. Perez sur, move in. F. E. Kistler's Cover 1, Gotaris sur, prep to sp. H. G. Venable's F. Dullnig 2, top sand 1060 ft, total depth 1100 ft, completing.

BROOKS COUNTY—M. P. Evans' A. Perez 1, Share 6, M. Perez sur, Alta Mesa, dr 1480 ft.

CALDWELL COUNTY — Bobrose O&R Co.'s Walker 2-B, S. Seal sur, still trying to complete 2255 ft. Cargill et al's Demaron 1, Dillard Cooper sur, 3 mi s Lockhart, show oil in chalk 1829 ft, cas set 1774 ft, bailed dry, to bail again. Louis Crouch et al's S. Nealson 1, John B. Gray sur, move on. Slam-Bang Construction Co. (J. M. Dickson) W. T. Mooney 1, S. Seal sur, dr 2180 ft hard shale. J. W. Kemp's George Vickery 1, Squire Damon sur, dr 1950 ft. Jimmie Lanning's Barber 1, S. Damon sur, black lime shale 2176-82 ft, show little oil. D. V. Smith's McMahon 1, James Pinchback sur, lcn.

COLORADO COUNTY—V. F. Neuhaus et al's Mattyles C. Barnett 1, Obid K. Winn sur, show gas 5130 ft, coring ahead.

DIMMIT COUNTY—Motes-Campbell Co.'s Denton 1, Tract 33-34, blk 60, Denton Colony Sub, 12 mi sw Carrizo Spgs., dr 1350 ft.

DUVAL COUNTY—J. M. Anderson et al's J. F. Welder 1, sec 71, coring 2300 ft. Byrd Oil Corp.'s P. T. Wright 3, sec 101, dk. L. W. Capps et al's W. R. Peters 1, sec 178, dr 1725 ft, last rept. H. H. Coffield's R. Wendt 4, sec 43, sp. Cole Pet. Co.'s Benavides 79, sec 20, Cole sub, Mariano Arispe Grant, blk 12, casing set 1717 ft, dr in. W. T. Daniels' F. J. Smith 1, sec 46, lcn. Hamill & Hamill's C. W. Hahl 4, sec 42, coring 2258 ft; C. W. Hahl 5, sec 42, lcn; C. W. Hahl 6, sec 42, lcn; C. W. Hahl 7, sec 42, lcn; C. W. Hahl 8, sec 42, lcn. Highland Oil Co.'s Lundvall 3, sec 42, sp; A. Lundvall 4, sec 42, lcn. Humble O&R Co.'s Paul White 8, sec 58, dr 2280 ft; Paul White 9, sec 58, lcn. J. A. Leidecker's G. W. Sutherland 1, sec 183, blk 8, cored sand 1803 ft. W. P. Luse et al's C. W. Hahl 1-B, sec 45, ½ mi sw field, top sand 2301 ft, total depth 2310 ft, completing. Mag. Pet. Co.'s Bryan White 2, sec 44, completing 2300 ft. Mag. Pet. Co.'s J. T. Johnson 5, sec 44, ru; J. T. Johnson 6, sec 44, lcn; G. Wendt 12, sec 44, move on. A. A. Broadbeck 2, sec 44, ru; Allen 3, sec 42, lcn. G. C. Porter's J. T. Smith 1, sec

46, sp. San Diego Oil Co.'s L. Bennett 2, sec 44, ru. Sarnosa Oil Co.'s A. Weil 3, sec 130, coring below 2300 ft; A. Weil 4, sec 130, lcn. Southwest Drlg. Co.'s R. Wendt 4, sec 43, lcn; R. Wendt 6, sec 43, coring 2290 ft. S. R. & C. Oil Corp.'s Duval Ranch 1, sec 192, dr 1000 ft. Sun Oil Co.'s Duval Ranch 1, sec 78, cored to 2161 ft, dry, coring ahead. The Texas Co.'s M. B. Johnson 4, sec 42, move on; C. W. Freer 1, sec 42, lcn; H. Wendt 1, sec 42, top sand 2227 ft, set cas. Whisenant-Trenchard & French Oil Corp.'s C. W. Hahl 3, sec 44, Rosita townsite, ru.

FRIO COUNTY — Amerada Pet. Corp.'s Halff & Openheimer 1, W. F. Halsel sur, 12 mi sw Pearsall, td 4785 ft, dr parted abt 1100 ft, fsh.

GOLIAD COUNTY—Plymouth Oil Co.'s A. M. Parks 3, lcn. Sam Vanderwess' Kauffman 1, lcn.

GONZALES COUNTY — E. Haenel, Jr.'s J. James 1-A, M. A. Williams sur, coring 1247 ft.

GUADALUPE COUNTY — Suttle et al's Halm 2, Josie Kent sur, lcn. The Texas Co.'s A. E. Dowdy 2, Jacob Darst sur, top Edwards 2560 ft, td 2567 ft, set cas, dr in. Tong & Altgelt's H. Rahe 1, Moe Baker sur, between McQueeny & Marion, dr 600 ft. Walton et al's Dan Darling 1, Ben Fuqua sur, move in.

JIM HOGG COUNTY—H. C. Cate's Lyendecker 1, blk 10, sur 143, sp. Clark & Cowden's C. W. Hellen, sec 50, move in. Sole Pet. Co.'s W. P. Allen 1, Halmuch sub, sec 13, sp. D. C. DeWitt's T. Gomez 1, sec 12, dr 2225 ft.

JIM WELLS COUNTY—F. C. Lain's V. Porter 1, tract 25, dr 2500 ft. J. E. Walsh et al's W. D. Wade 1, lot 2, dr 800 ft.

KARNES COUNTY—Adams & Lyles, Porter & Humble's A. E. Ingram 1, C. Martinez sur, dr new water well, to sp shortly. Tippett & Mull's Smith 1, Francis Hoskins sur, prep to sp.

KENDALL COUNTY—Verlans Trust Co.'s W. Werner 2, sec 782 sur, se cor blk 3, lcn.

KERR COUNTY—Eastland Oil Co.'s Jeff Love 1-C, 1595 CCSD&RGNR sur, move on. Van Duyn & Moore's R. W. Nowlin 1, No. 99, J. E. Bettner sur, set sur cas, re-dr.

LA SALLE COUNTY—Interstate Oil Industries, Inc.'s, J. F. Mayes 1, blk 20, I&GN Ry. sur No. 19, dr 2825 ft.

LIVE OAK COUNTY—C. J. Webster O&G Co.'s O. F. Akers 1, T. Henry sur, 3 mi w Three Rivers, re-dr below sur cas.

McMULLEN COUNTY—Jacob, Buzzini & Pickett's Jacob 8-A, W. H. Jacob sur No. 8, sec —, cas 958 ft, woc; Jacob 9-A, W. H. Jacob sur No. 8, cas set 950 ft, dr in. F. B. Lefevre & Ballard's L. Jacob 1, W. D. Benham sur, cored sand abt 950 ft, testing. V. G. Schimmel et al's W. E. Wulf 1, sec 65, Two Rivers sur, set 80 ft sur cas, woc. C. C. Shumway's Shiner 1, blk 45, new Shumway sur, ru. Skinner & Bailey's F. H. Burmeister 1, blk 1, GH&H sur, sec 14, set 60 ft sur cas, woc.

MEDINA COUNTY—James E. Greenlee's F. Fasseler 1, Sec. 799, L. G. Harrison sur, show oil sandy shale 1215-30 ft, wait on cas. T. A. Ryal's G. Martin 1, Henry Castro sur No. 368, sd 200 ft. W. L. Umburn et al's P. Jungman 2, N. B. Rogers sur, sand 795-816 ft, show oil, cas set, dr in.

MILAM COUNTY—Ed Clark's Pritchard 1, F. Ernst sur, ru. Union Commercial Oil Co.'s Terry 1, Jose Leal sur, dr abt 1500 ft.

NUECES COUNTY — Capps & Smith's Hutchins 1, sur 416, lcn. Gibson Oil Co.'s R. Morgan 1, sec 405, set 505 ft 10-inch, dr ahead. Gulf Coast Oil Co.'s Bessie Elder 2, Saxet, dr 4430 ft; Frank Bliss 1, pull liner to wo; Frank Bliss 3, sec 406, lcn. Gulf Port Oil Co.'s Isencee 1, C. Land sur, dk; Isencee 2, Chas. Land sur No. 404, lcn; John M. Luby 1, blk 1, sec 2, A. Collins sur, dr 3500 ft. Houston Oil Co.'s W. W. Walton 1, Sge 6, sec 9, dr 4485 ft, sw sand. Carter, Kelly & Miller et al's Harney 1, 4 mi nw Saxet field, ru. George Noble et al's Home Land Syndicate 1, blk 18, sec 12, lcn. Saxet Gas Co.'s J. Dunn 9, E. Villareal sur, dr 2500 ft. O. R. Seagraves, Trustee's, Perkins & Legasse 1, blk 22, Shepherd Frm lots sub, dk. Titus & Calloway's Perkins & LeGasse 1, blk 26, H. B. Shepherd sur, set 464 ft 10-inch, dr ahead; Perkins & LeGasse 2, blk 25, H. B. Shepherd sur, set 495 ft 10-inch, woc; Perkins & LeGasse 3, blk 25, Shepherd sur, sp; R. Morgan 1, sur 405, dk; K. Hutchins 1, blk 30, H. B. Shepherd sur, set 487 ft 10-inch.

REFUGIO COUNTY—Humble O&R Co.'s O'Conner 3, F. Rios sur, sand 3136-43 ft, test 700 ft oil dst 2½ min, cored to 3148 ft, test 3100 ft oil dst 10 min, set cas, woc.

SAN PATRICIO COUNTY—Chiltipin O&G Co.'s E. H. Welder 1, blk 5, Portillo sur, dr 5270 ft.

STARR COUNTY — Austin & Reynolds' Kelsey Bass 1, sec 4, Por. 75-76-77, lcn. B. & B. Oil Co.'s Kelsey Bass 1, Por. 87, sand 2005-32 ft, show oil and sw, dr deeper. Boyd Jones et al's Garza 1, Por. 75, share 3, move on. W. W. Covington's G. F. Carreon 1, sec 13, tract 3, Por. 75, lcn. Goodwin & Yantis' Seabury, George & Taylor 1, Por. 75, prep to sp. J. E. Harper & Co.'s E. Salinas 1, Por. 75, share 16, lcn. D. A. Miller et al's Madrigal 1, share 15, Por. 67 to 72, lcn. Sinclair-Culberson's Kelsey Bass 1, Por. 75-76-77, Share 5, top sand 432 ft, set cas, woc. Los Olmos O&G Co.'s Kelsey Bass 27, share 7, top sand 467 ft, set cas, woc; Kelsey Bass 28, share 7, dr 368 ft; Kelsey Bass 29, share 7, rep rig 259 ft. L. G. Mundy's M. R. G. Salinas 1, share 38-C, blk 12, Por. 80, sp. Tarver & Nance, Inc.'s, Kelsey Bass 7, Sec. 76, blk 7, dr 157 ft. Hornaday & Porter's Kelsey Bass 1, sec 7, Por. 75-76-77, top sand 458 ft, set cas. Keck & Keane's Kelsey Bass 2, sec 6, Por. 75-76-77, lcn. Warner-Doyno's Seabury, George & Taylor 1, share 5, sand topped 389 ft, set cas.

TRAVIS COUNTY—Franklin et al's Reimers 1, sur 35, sp.

VICTORIA COUNTY — Cullen & West's Keeran 2, M. de Leon sur, dk. Gulf Prod. Co.'s Keeran 3, M. de Leon sur, prep to sp. Houston Oil Co.'s W. T. Beck 2, Lot D, I. Ry. sur No. 26, dr 2700 ft. Slick-Seeligson's McFadden 2, J. Varin sur, dr 6105 ft. Texas Co.'s A. M. McFadden 5, J. A. McFadden sur, ru. Union Oil Co.'s C. N. Keeran 2, dr 3600 ft.

WEBB COUNTY — Hamill & Hamill's S. Lloyd 1, blk 15, sur 25, ru. Montex Oil Co.'s B. Rosenburg 1, sec 271, blk 5, move on. Newton et al's Flores 1, sur 249, Mirando Valley, lcn. B. Rosenburg's M. Vela 1, blk 4, sur 267, gas sand 1869 ft, completing. South Texas Oil Co.'s Laurel 2, sec 270, sp.

ZAVALLA COUNTY — Adair & Daniels' Gates 1, sur 13, td 3218 ft, ru to deepen.

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GULF COASTAL FIELDS

Brazoria County Wildcat Gives Promise of a New Field; Wharton and Polk Counties Continue Holding Interest.

WM. V. GROSS, *Staff Representative, Houston, Texas*

Pledger Wildcat to Run Screen and Test Saturday

Houston.—Screen was scheduled to have been set November 12 in Danciger Oil & Refining Company's W. S. Hunt 1, in Brazoria County, a wildcat in the Pledger district giving indications of ushering a new oil field into the Gulf Coast. It is located on what is known as the Pledger prospect.

Hunt 1, with a corrected total depth of 6782 feet, topped an oil sand at 6758 feet prior to setting 7⅝-inch casing at 6753 feet on a shoulder left as result of ratholing ahead.

The wildcat is in the northeast corner of Brazoria County, about four miles east and a little south of the town of Pledger. Territory around it was subjected to geophysical exploration in 1929 by Humble Oil & Refining Company and Rycade Oil Corporation. It was following a geophysical survey in 1932 that Danciger Oil & Refining Company entered the area to prospect with the drill, picking a spot 5220 feet south of the north line and 6500 feet west of the east line of the W. C. Coirson Survey for W. S. Hunt 1.

While the Pledger prospect may be said to be rendered more attractive due to recently discovered deep production at Buckeye on Matagorda County holdings of United North and South Development Company, where Stoddard 1 is producing from the Oligocene at 7926 feet, it will be directly responsible for the keen interest taken in a new Matagorda County wildcat.

Humble Oil & Refining Company's new location on the Pierce Estate in Matagorda County lies between the Pledger wildcat and the Buckeye townsite production. This latter organization is said to have conducted geophysical surveys of the Pierce Estate holdings in Matagorda County and condemned same as a result of such surveys. Rather that allow the leases to revert to them, administrators of the estate turned 10,000 acres thereof to the Humble for a drilling obligation, to be shared by Gulf Production Company on a 50-50 basis. Humble Oil & Refining Company's Pierce Estate 1 will be drilled north of Bay City, in the Isaac Parker Survey, or exactly 330 feet from the north line and 330 feet from the center of the road connecting Pledge and Bay City. As it is only about 20 miles notheast from Buckeye production to the new sand at Pledger, and as the Humble test will lie within this gap, it naturally will be closely watched for trend developments.

Polk County Continues to Hold Gulf Coast Attention

Houston.—With one of the two projected wildcats near Dick Schwab's discovery well eight miles south of Livingston, Polk County, well under way, interest in the vicinity three miles south of the old Sunshine pool continues to attract Gulf Coast operators, lease buyers and royalty purchasers. And while acreage in the immediate vicinity of the well has been pretty well sewn up by Schwab et al, Shell Petroleum Corporation, Abercrombie and Harrison, Sun Oil Company, Humble Oil & Refining Company, and McElreath & Suggett, attractive offers continue being made for desirable blocks.

Royalty purchasing has been unusually active in the area due partly to the difficulty in obtaining enough rights on likely acreage to warrant drilling, prices as high as $200 and $250 for one eighth base being paid.

Schwab's Davis-Holmes 1 set 499 feet of surface casing this week and is drilling ahead on a location 1050 feet west of southwest of the Carlton-Davis 1, discovery well estimated good for 20 million cubic feet of gas at 4311 feet and then closed in to register an 1800-pound pressure. Schwab started the well after an advance of $25,000 from Shell Petroleum Corporation in return for an option to purchase the discovery well and 675 acres of surrounding leases, the option to be exercised 30 days after completion of Davis Holmes 1, located 325 feet east of the R. D. Munson 25-acre tract and 2425 feet north of the south line of the Jim Duff tract in the Augustine Viesca Survey.

The region's third test, expected to be under way shortly, will be drilled in the John Swinney Survey, south of the discovery well, by Abercrombie and Harrison, veteran Gulf Coast operators who recently obtained lease on a 9300-acre block from Carter Lumber Company for a reported consideration of $150,000 cash and $750,000 additional out of one fourth of oil produced. Including this block, these operators hold lease on about 14,000 acres in the vicinity.

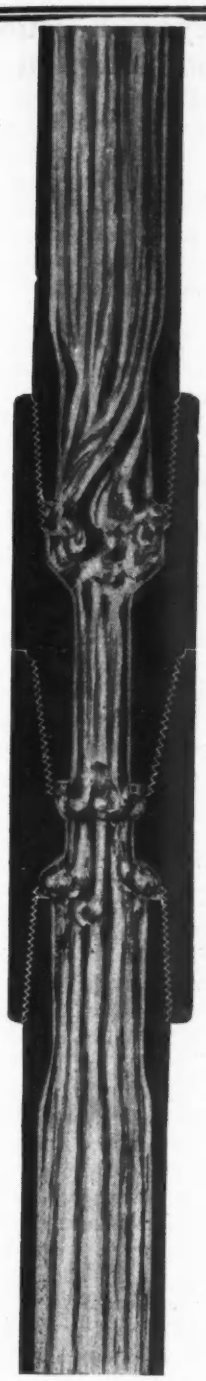
More Shows Accentuate Wharton County Activity

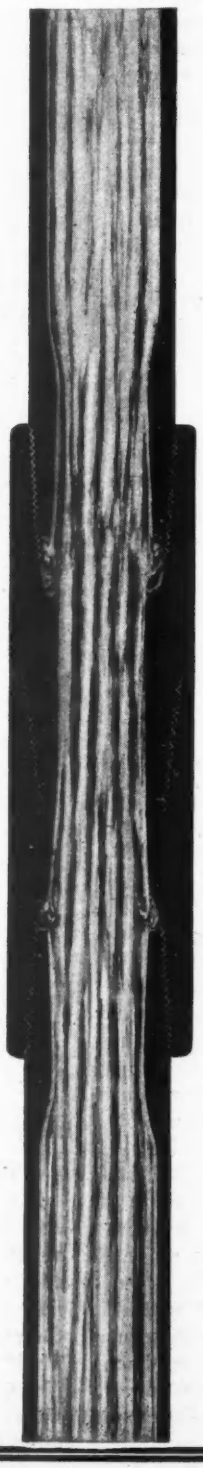
Houston.—Bidding for leases and royalty in four areas of Wharton County continues active along with favorable findings of wildcat drilling.

Smith & McDaniel's (Shell Petroleum Corporation) Mitchell 1, located on a 320-acre tract in the southwest quarter of Abstract 661 of H.&T.C. R.R. Survey No. 8, continues drilling below 5335 feet, after having been in what is believed to be the Frio at 5320 feet. This wildcat already has logged four shows of gas—one at 3064-3121 feet which showed 200 pounds pressure on a quarter-inch choke in four minutes. Another at 3170-3203 feet showed 300 pounds on a quarter-inch choke in about the same period. A third at 3990-4067 feet showed 1000 feet of mud in six minutes. At 4225-83 feet some gas showed in a mixed formation.

Mitchell 1, which is 2½ miles northeast of El Campo, is testing a 3500-acre block; it does not contemplate encountering anhydrite or salt inasmuch as the prospect being explored is considered a deep-seated dome of non-piercement type, with salt speculatively estimated at a depth of at least 10,000 feet. Elevation of Mitchell 1 is 118 feet.

Another area in Wharton County considered likely for discovery of oil is that being prospected by Gant and Teas with the wildcat on the Laura Hahn farm, 14 miles north of El Campo. The wildcat originally was a project of Wood R. Alexander et al, who turned it to Treble Oil Company, who in turn transferred it to Gant and Teas. Hahn 1, located 330 feet each way out of the northeast corner of an 142-acre tract in the N. Mancha





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Survey, also has encountered favorable indications of the nearby presence of oil. The well went into eight feet of gas sand at 3315 feet in what was believed to be Middle Oligocene. While it was shut down to clear title on some acreage a blowout occurred. With an elevation of 143 feet, the wildcat is drilling below 5072 feet.

Cullen & West, discoverers of Rabb Ridge field and old-timers in Gulf Coast oil activities, are drilling two wildcats in the neighborhood of Hungerford. One well, Hawes 1, located about a mile northeast of Hungerford and near the Wharton-Fort Bend County line, was drilling in model, or variegated, shale at 2951 feet late in the week. The second well, located southwest of Hungerford in the Hudgins 319-acre tract in the Alexander Jackson Survey, was drilling in shale below 1504 feet at the same time.

Steed Production Company's Lurker 1, wildcat which will test what is known as the Leech dome prospect, a Cockburn discovery, will be forced to spud by November 15, according to drilling obligations. This well will be drilled in the southwest quarter of Section 58 of the E.T. R.R. Survey, near the town of Hilje. Lurker 1 brings into play blocks of acreage six miles southwest of El Campo held by The Texas Company, Gulf Production Company, Alpha Oil Company, Cockburn Oil Corporation, Shell Petroleum Corporation and Pure Oil Company, and a number of independent operators.

Lease expiration dates on Pure Oil Company's block of about 4000 acres south of the town of Louise and adjoining the Leech prospect acreage will necessitate a wildcat there about January 1, or Pure Oil Company will allow the leases to revert to the owners, which is not probable in view of present conditions.

Search Continues for Commercial Oil at Ariola

Houston.—More commercial oil than was in the discovery well might be there, but they haven't located the field yet, all they've got is salt, seems to be the general opinion regarding efforts of Houston Oil Company and Republic Production Company at Ariola prospect in Hardin County.

Four important tests are drilling in the area. As of November 11 the status of each was: Gulf Production Company's Kirby Lumber Company 1, half-mile northwest of the discovery well, drilling in hard sand at 5670 feet with no favorable shows; Houston Oil and Republic Production Company's Ariola Fee Y-1, drilling in sand at 3115 feet after being delayed by a fishing job at 2074 feet; Houston and Republic's Ariola Fee Z-1, southwest of the discovery well about 2800 feet, drilling in hard sand at 4135 feet, and their Ariola Fee 2, 660 feet east of Gulf Production Company's Kirby 1, drilling in hard shale and lime at 5360 feet.

Ariola Fee 1, the discovery well, was completed September 14 at 4157 feet for 320 barrels of net oil, representing 40 per cent of the well's output. It died in a few days.

Austin, Texas. — Assistant Attorney General Maurice Cheek filed suit November 12 in the district court here asking an order restraining Alpha Petroleum Corporation from violating proration orders of the Texas Railroad Commission in effect at Conroe oil field, Montgomery County.

Alpha Petroleum Corporation, which had obtained an order restraining the commission from enforcing proration on leases of the Alpha in Conroe, has been producing in excess of the per well allowable for the field for several weeks on the authority of the injunction granted against the commission.

Hufsmith Leasing Trends Toward Conroe Oil Field

Houston.—Lease play around the William White Survey in the Hufsmith vicinity of Harris County generated by coring of an oil sand around 5595 feet in Indian Hill Oil Company's Schweinle 1, has spread to the neighborhood of Tomball and over in Montgomery County, drawing into the play Kirby Petroleum Company, United Gas Company, and Gulf Production Company, in addition to a number of smaller independent operators. Protection acreage around the play has been going for from $5 to $20 per acre. It probably will go higher.

Due to reported trouble with unacknowledged leases, the wildcat was reported merely circulating mud and rotating November 11 in sandy shale at a total depth of 5633 feet. The well, which has an elevation of 150 feet, was reported to have topped the Hockleyensis at a minus 4560 feet, reported at the time as comparing normally with average findings of the same formation in Conroe field, taking into consideration relative position of the two with reference to the Reynosa-Lagarto contact. Cockfield was reported at sub-sea 5330 feet.

Schweinle 1, located 900 feet south 80 degrees west from the northwest corner of the C. C. and F. W. Lineberger 20-acre tract in Block 1 of the above survey, spudded early in July in a locality about 10 miles south of Conroe.

New Gueydan Location May Force Gulf Into Action

Houston.—Pure Oil Company has announced another test for Gueydan dome in Vermilion Parish, Louisiana, to be drilled on a spot 1515 feet from the north line of Section 34 and 1150 feet from the east line of the Mulvey Irrigation Company lease, which is also the west line of Gulf Refining Company's 161-acre Conner lease.

Action of Pure Oil Company in announcing this location is expected to bring Gulf Production Company into action at Gueydan, Shell Petroleum Corporation, another leaseholder in the parish having already announced intention to drill B. C. Herbert 1 in Section 10-15s-1e. A rig is moving on the location.

Pure Oil Company's Alliance Trust Company 3, the only actively drilling well on Gueydan prospect, November 11 was drilling in lime at 3843 feet, having cored a sand without a kick at 3828-33 feet.

The discovery well of Gueydan, completed in March, 1932, is producing around 500 barrels per day from 4029 feet. It obtained less satisfactory production from a 3500-foot horizon. Mulvey Irrigation Company 1, another Pure Oil Company well, found oil sand at 4004 feet.

Houston.—A pipe line connection for Pure Oil Company's oil production in the Gueydan oil field, Vermilion Parish, Louisiana, with a barge terminal on the Mermentau River has been provided through construction of 10½ miles of eight-inch line by Pure Van Pipe Line Company. Heretofore the latter concern, a fully owned subsidiary of Pure Oil Company, has confined its activities to gathering and transporting crude from the Van field and common carrier service from the East Texas field through a connecting system to terminals at Smiths Bluff, near Beaumont. The Gueydan crude will also be consigned to Smiths Bluff, where Pure Oil Company operates a large refinery. Salvaged 8¼-inch casing was used in providing the Gueydan area with a pipe line outlet, and the collars were welded on each end to safeguard against possible leaks in the rice fields crossed by the line. A 37,500-barrel storage tank has been erected.

Fort Bend County Test Passes 7000-Foot Depth

Houston.—Indications are that Naylor and De Costa intend to give that portion of the Horatio Chrisman Survey lying a mile and a half north of Thompson Station, near Rabb Ridge field in Fort Bend County, a thorough test for production. Their Naylor 1 has passed 7005 feet and November 11 was still drilling, with no shows of commercial importance encountered from the grass roots down.

Texas Gulf Coast Field Developments

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
CONROE FIELD—		
Houston Oil Co.-Heep Oil Corp., C. L. Dobbins 1	516	5102
Humble Oil & Ref. Co., Cartwright A-6	2400	5176
HOCKLEY FIELD—		
Jno. Deering, Warren 1, Theo Snell sur	*	2411
HULL FIELD—		
Aber Oil Co., Fee 1	*	42
Republic Prod. Co., Dolbear 19, old td 5020 ft	*	1689
Dolbear 141	*	2839
POLK COUNTY—		
Dick Schwab, Carlton Davis 1, Augustine Viesca sur	¶20	4311
PORT NECHES FIELD—		
The Texas Co., Polk-Kuhn Glass Co. 2	44	3493
SOUR LAKE FIELD—		
Houston Prod. Co., Merchant 1	*	4051

Wildcat Drilling Report

(Wells shut down not included)

BRAZORIA COUNTY — The Texas Co.'s Ewing 2, Manvel, dr 4100 ft. Danciger O&R Co.'s W. C. Hunt 1, near Pledger, W. C. Carson sur, dr 6767 ft in shale and sand. Gulf Prod. Co.'s Lockwood 1, midway between Damon Mound and West Columbia domes, Wiley Martin sur, dr 4000 ft. Gulf's American National Insurance Co. 1, Sandy Point or Lockridge prospect, E. R. Bradley sur, dr 2000 ft gbo. A. H. Parsons et al's J. D. Hughes 1, Halls Bayou prospect, A. L. D. Lewis sur, dr 2753 ft. Shell Pet. Corp.'s Blakely-Winston 5, Danbury dome, H. T. B. R. R. sur, Sec. 14, dr 4776 ft shale. W. D. Sutherland et al's C. W. Chapman 1, Sandy Point prospect, Andrew Robinson sur, dr 5620 ft shale. Tri-Fin Oil Co.'s Moers 1, F. Moore sur, 6 mi sw Alvin, dr 2230 ft.

BURLESON COUNTY—Poor Boy Oil Co.'s Polansky 1, 6 mi w Lyons, M. B. Lawrence sur, dr sand and shale 2160 ft. Shilo Oil Co.'s Bracey 1, near Somerville, J. Lastly sur, dr 2243 ft sandy shale. Sanson Oil & Gas Co.'s Duckworth & Gilley 3, P. Singleton sur, near Clay, dr 2504 ft.

CHAMBERS COUNTY—Yount Lee Oil Co,. Plummer 1, lcn 2340 ft s and 2640 ft e of nwc Sophie Plummer sur. Weaver & Ray, Fisher 1, 210 ft sw of Rucker et al Fisher 1, in Jno Ijams sur, lcn.

COLORADO COUNTY — Neuhaus et al's McBarnett 1, Q. K. Winn sur, dr 5120 ft.

FORT BEND COUNTY — Lynch et al's Kneitz 1, 3 mi sw Big Creek dome, H&TC sur, Sec. 43, set 90 ft of 10-inch cas, prep to core. Naylor & DeCosta's Naylor 1, 1½ mi n Thompson's Station, dr 7005 ft shale. North Star Pet. Co.'s Guyler 1, 3 mi nw Orchard, dr 5204 ft shale. Paul & Gerke's Krenek 1, near Orchard, Gail Borden sur, dk. Magnolia Pet. Co.'s Hampil 1, n of Rabb Ridge field, H. Criesman sur, dr 5960 ft sand. Humble & Gulf's J. H. P. Davis 3, Rabb Ridge, dr 6384 ft shale.

GALVESTON COUNTY — Humble O&R Co.'s Elias V. Rosenkranz 1, Greens Lake prospect, 4 mi sw Hitchcock, Sarah White sur, dr 6951 ft shale.

GRIMES COUNTY—J. C. Barnett et al's G. W. Dodd 1, ne part of county, w of Iola, Timothy Jones sur, dr 2695 ft. W. J. Brightwell's Combs 1, Bedias district, Samuel Beauman sur, flowed salt water in 15 mniutes on dr stem test at 4070-4090 ft, dr 4604 ft. Petroleum Southwestern Corp.'s Greer Bros. 1, near Carlos, Pat B. O'Connor sur, dk. J. C. Barnett, McMillan 1, lcn 2460 ft s and 200 ft e of nwc Thos. McDonald sur.

HARDIN COUNTY—Republic & Houston Oil Co.'s Ben Andrews Fee 1, 6 mi e Ariola dome, S. K. Vanmeter sur, dr 5040 ft shale. S. Robichaux et al's McShane 1, 1½ mi ne Votaw, Benj. H. Hawkins sur, ru. Gulf Prod. Co.'s Kirby Lbr. Co. 1, Ariola dome, ½ mi nw discovery well, dr 5260 ft. Houston Oil Co.-Republic Oil Co.'s Ariola Fee Y-1, Ariola dome, fsh 2074 ft; Z-1, dr 3775 ft salt water sand; Ariola Fee 2, dr 4510 ft; Ariola Fee 3, lcn. Joe E. Proctor's J. R. Bevil 1, 1½ mi w Sour Lake dome, W. W. Young 1, dr 3015 ft.

HARRIS COUNTY—T. V. Buckholv's Miller 1, Deer Park district, Arthur McCormick sur, dr 1310 ft gbo. Indian Hill Oil Co.'s W. L. Schweinle 1, near Hufsmith, Wm. White sur, cored shale 5602 ft, sd 5633 ft.

JASPER COUNTY—Gulf Prod. Co.'s Miller Vidor Lumber Co. 1, sw corner of county, Sarah Gray sur, dr 5056 ft shale. Houston Oil Co.'s Richardson Fee 1, 3 mi e Evadale, Benj. Richardson sur, dr 3858 ft sn and shale. Smitherman, Nelson & Noble's Cameron Lbr. Co. 1, 3 mi nw Beech Grove, moving in rig.

JEFFERSON COUNTY—Coast O&G Co.'s J. O. B. Young 1, 3 mi ne Pt. Arthur, Jos. Grigsby sur, dr shale 3210 ft. Jack Schultz's O. M. Todd 2, Cheek prospect, Wm. Carr sur,

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls.—barrels; b.s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; woc—waiting for cement to set; wosr—waiting on standard rig.

B. K. Appleman Receives

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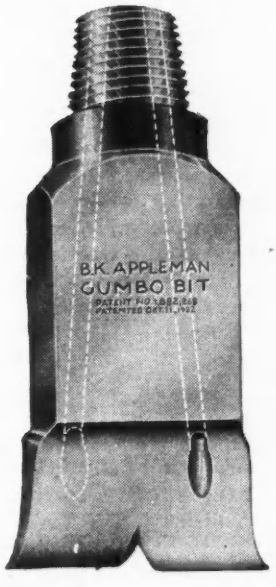

SIX VALUABLE CLAIMS are contained in the U. S. Patent No. 1,882,268, issued October 11, 1932.

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THANKS FOR YOUR SUPPORT AND HERE'S FOR A GREATER FUTURE

B. K. APPLEMAN

BEAUMONT, TEXAS

dr 5450 ft shale. Jno. R. Turnbull's Junker 1, Fannett, dr 1360 ft.

MATAGORDA COUNTY — Cockburn Oil Corp.'s Hawkins 5, Sheppards Mott, moving in materials. Rugeley et al's Cleveland 1, 1 mi w Bay City, E. Hall sur, dr 1420 ft gbo.

MONTGOMERY COUNTY—A. H. Parson's Drought 2, J. Kronkite sur, digging w well. Sutton & Hawkins' T. S. Foster 1, Jose M. de la Garza sur, sd 3489 ft. Miller Prod. Co., Foster Lbr. Co. 1, M. B. Lawrence sur, dr 4485 ft.

NEWTON COUNTY—L. A. James' Price & Bevil 1, 4 mi ne Bleakwood, cored green shale at 1908 ft. Sun Oil Co.'s Peavey-Moore 1, sw corner county, F. Stover sur, dr 6789 ft.

ORANGE COUNTY—Houston Oil Co.'s E. Hurst 1, E. Hurst sur, dr 1350 ft. E. L. Smith Oil Co.'s Miller-Vidor 1, J. W. Swisher sur, dr 900 ft.

POLK COUNTY—Joseph L. Anderson's E. I. Duke 1, Ace dome prospect, prep to resume at 780 ft. Ace Oil Co.'s M. E. Roberts 1, Ace dome prospect, sd at 3410 ft. Kach & Stephenson's R. H. Root 1, Lawrence Castillian sur, sd at 3420 ft. Dick Schwab's Carlton-Davis 1, 8 mi s Livingston, still closed in after developing gas flow at 4311 ft; Davis-Holmes 2, lcn 485 ft n and 376 ft w of nec Jiff Berff 35-ac tr, Aug-Viesca sur.

SAN JACINTO COUNTY—Weaver et al's Delta Land & Timber Co. 1, Jas. W. Robertson sur, digging slush pits.

TRINITY COUNTY—C. M. Beckner et al's J. B. Gibson 1, Wm. Beasley sur, dr 940 ft shale.

TYLER COUNTY—Republic-Houston Oil's Sterne Fee 1, Spurger discovery well, will be deepened from 4708 ft after having developed gas flow and later almost sanded up; Sam Jeffcoat 1, 650 varas nw discovery well at Spurger, dk.

WALLER COUNTY—Bunte & Hobson, Joe W. Harris 1, near Prairie View, dr 4675 ft shale.

WHARTON COUNTY—Gant & Teas' Laura Hahn 1, 14 mi n El Campo, dr 5010 ft. Smith & McDaniel's Mitchell 1, 2½ mi ne El Campo, dr sandy shale at 4978 ft.

Louisiana Gulf Coast Field Developments

Completions

Company, Well and Location	Initial Production Bbls.	Depth
EAST HACKBERRY FIELD—		
Calcasieu Oil Co., Watkins 27 wo..	*	2982
Jim O'l Co., Erwin 9.....	40	2974
STARKS DOME—		
Gulf Ref. Co. of La., Lutcher Moore 31 1400		3721
SULPHUR DOME—		
Union Sulphur Co., Fee 770.....	273	4679
Fee 772	97	3806

Wildcat Drilling Report

(Wells shut down not included)

ACADIA PARISH—Olympic Oil Co.'s Luckett 1, Jennings, spudded; Yount-Lee Oil Co.'s Houssiere-Latrielle 11, Jennings, dr 6080 ft rock.

ASCENSION PARISH—Union Sulphur Co.'s United Lands Co. 22, Sorrento, dr 4729 ft rk.

CALCASIEU PARISH—Dr. T. W. Irvine's Mimms 1, sec 20-9s-7w, dr 1530 ft shale. The Texas Co.'s Miller Est 1, Edgerly, dr 5480 ft shale. Emerson & Starks' Ind. Lbr. Co. 1, Starks dome, dr 4990 ft sand. Gulf's Lutcher Moore 31, Starks, completed.

CAMERON PARISH—Magnolia's Cameron Meadows 3, sec 21-14s-13w, ru.

IBERVILLE PARISH — Shell's Wilbert 6, White Castle, dr 4762 ft hd sand. Standard Oil Co.'s Gay 3, Choctaw dome, lcn.

JEFFERSON DAVIS PARISH—B. D. Fenley's Lognion 1, sec 22-10s-4w, sd 40 ft. Shell's Fontenot 2, Iowa field, dr 6852 ft shale.

TERREBONNE PARISH—The Texas Co.'s L. L. E.-Lake Barre 4, Lake Barre dome, dr 1126 ft. The Texas Co.'s State Lake Barre 7, wo, fsg 5230 ft. The Texas Co.'s State Lake Barre 17, Lake Barre dome, 4435 ft salt.

VERMILION PARISH—Pure Oil Co.'s Alliance Trust Co. 3, Gueydan, dr 3489 ft shale and sn.

VERNON PARISH—Minerals Div. of Llano Co., Llano del Rio 1, sd at 2735 ft.

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls.—barrels; b.s.—basic sediment; cas—cas'ng; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn — location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd — shut down; sdtr — s'detracking; sp — spudding; sr — straight reaming; std — standardizing; sw — salt water; td—total depth; ur—underreaming; wo—workover; woc — waiting for cement to set; wosr—waiting on standard rig.

LOUISIANA FIELDS

Second Sabine Parish Area Has 14 Active Operations to Compare With Zwolle Where the Usual Extension Was Made.

Zwolle Production Goes Quarter-Mile North

Shreveport, La.—Production in the part of the Zwolle chalk-marl producing field southwest of the townsite of Zwolle, was extended one fourth mile north last week when Coates Petroleum Company's Stille 2, SW SE SW Section 35-8-13, was completed as 15-barrel pumper in chalk at 2465 feet.

Altogether during the last week Zwolle had four new locations, three in a newly opened "hot spot" in the northeast part of the east field centering around Section 30-8-11.

Besides the extension pumper there were three other producers in Zwolle's total of eight completions last week. The largest of the week's producers is Ben F. Smith's Turner 3, Section 4-7-11 in the southeast part of the field, which is flowing 1650 barrels of oil daily through three quarter-inch choke from 2244 feet. J. B. Hughes' Johnson 1, SW NW Section 2-7-11, is flowing by heads through casing at a rate of 225 barrels of oil daily from 2504 feet.

W. C. Turnbow is preparing to standardize Williams 4, SW NW Section 13-7-11, at 2632 feet after finding 2100 feet of oil had risen in the hole after it was abandoned last September 25 as a dry hole. This is a frequent occurrence in Zwolle where production is found in breaks in the marl and chalk at various depths from 2100 to 2700 feet.

Nine Locations Increase Converse Actives to 14

Shreveport, La.—Nine new locations were announced during the week ending November 9 in the new Converse district of Sabine Parish 6½ miles north of Zwolle, both being in Sabine Parish. This brings the total of operations in Converse to 14. Converse at present has one producer, a 40-barrel pumper, Gibson-Johnson & Higgins' Frost Lumber Company 1, NW SE Section 19-9-13, at 1626 feet in chalk. The same operators have delayed drilling in Frost Lumber Company 2, NE NW NE Section 15-9-13, which showed oil in the Nacatosh at 1516 feet.

The new tests for Converse started last week are: Service Drilling & Royalty Corporation, Whitney Corporation 1, SE SE Section 32-10-13, rigging up; J. Alford and Cleary Brothers, Jackson 1, SE NW Section 10-9-13, location; Patrick 1, SW NE Section 11-9-13; Patrick 2, SW NE Section 11-9-13; Nick Barbare and associates' D. B. Ryals 1, NW NW Section 27-9-13, rigging up; Lee & Burnett's A. J. Burkett 1, NW SW Section 10-9-13, already drilling below surface casing; Rockmill and associates' Bowman-Hicks 1, NE NW Section 36-9-14, derrick; E. M. Self, G. I. Paul 1, NE SW Section 9-9-13, derrick; and Ben Youngblood and associates' A. J. Burkett 1, NE NW Section 10-9-13.

Besides the new tests there are two other rigs up, one test drilling and another ready to drill plug in 8¼-inch casing. The latter test is Sandfield Oil Company's Bowman-Hicks 1, NE NE Section 26-9-13, which logged marl at 1707 feet at which point casing was set after two feet more had been made in marl; elevation is 302 feet.

Wildcat Drilling Continues On Increase in North Area

Shreveport, La.—Wildcatting continues to increase in North Louisiana, three wildcat locations having been announced during the week ending November 9, besides the nine tests launched for the new Converse field and four tests for the Zwolle field.

Breazeale & Steckol, whose Nattin 1, Section 15-22-14 cored 33 feet of broken sand and sandy shale, and cemented casing at 2998 feet, has materials on location for a second test in that area, Nattin 2, NW NE Section 22-22-14.

United Gas Public Service Company made location for another test in the Rodessa gas field north Caddo Parish, where deepest production in North Louisiana is obtained in oolitic lime of the Glen Rose at the 5500-5600 foot level, the new test being Caddo Levee Board 1, Section 27-23-16.

Several miles south of the shallow Bellevue field of Bossier Parish, now

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abandoned where production was obtained at 300 feet in the Nacatosh, Texana Oil Company has spudded Alford 1, NE SW Section 10-18-11, and is drilling below 1100 feet.

United Gas Public Service Company is rigging up to deepen Schnitt 1, NW SE Section 14-17-12, in the Elm Grove gas field, this test having been completed nearly two years ago at 1965 feet as a five million foot gasser.

Several miles west of the Richland Parish gas field, Millhaven Gas Company has made location for West Virginia Land & Timber Company 1, located 1980 feet east and 1320 feet north of center of Section 10-17-5e, Ouachita Parish.

North Louisiana Field Developments

New Operations

BOSSIER PARISH—Texana Oil Co., Houston, Texas, Alford et al 1, 10-8n-11w, 1140 ft w and 180 ft s cen of sec.

CADDO PARISH—United Gas Public Serv. Co., Shreveport, Caddo Levee Board 1, 27-23n-16w, 1980 ft n and 1320 ft e sw cor sec.

CALCASIEU PARISH—Union Sulphur Co., Sulphur, Moss 4, 8-10s-9w, 150 ft n and 150 ft w se cor nw¼ se¼ sec.

CAMERON PARISH — The Texas Co., Shreveport, State-East Hackberry 11, ..-12s-10w, 1000 ft e and 600 ft n ne cor sec 13-12s-10w in sec.

OUACHITA PARISH — Millhaven Gas Corp., Monroe, W. Va. 1, 10-17n-5e, 1980 ft e and 1320 ft n of cen of sec.

PLAQUEMINE PARISH—Freeport Sulphur Co., New Orleans, Cockrell-Moran 5, ..-21s-26e, Approx. 11,650 ft n and 425 ft w ne cor sec.

SABINE PARISH—E. F. Neely, Shreveport, Ponder 5, 16-7n-11w, 580 ft s and 870 ft w ne cor sec. Nick Barbare, Waskom, Texas, D. B. Ryals 1, 27-9n-13w, 330 ft s and e from nw cor sec. Lee & Burnett, Gladewater, Texas, A. J. Burkett 1, 10-9n-13w, 330 ft w and 330 ft n se cor nw¼ sw¼ sec. F. A. Bates, Dallas, Texas, Snell 2, 9-7n-11w, 150 ft from s line and 250 ft from Well No. 1 of sec. Henry Rochmill, Fort Worth, Texas, Bowman-Hicks 1, 36-9n-14w, 330 ft s and w ne cor nw¼ of sec. Thomas E. Nix, Oklahoma City, Okla., W. M. Cooper 1, 30-8n-11w, 104 ft e and s nw cor ne¼ se¼ 1-ac Tr. 2087 in sec. E. L. Hurst, Cedar Grove, La., Livingston 1, 9-7n-11w, 330 ft s and e nw cor sw¼ nw¼ of sec. C. Dewitt Loe, Tr., City, Whitney Corp. 1, 12-9n-14w, 330 ft n and w se cor ne¼ of sec. W. F. Lacy, Shreveport, W. M. Cooper 3, 30-8n-11w, 183 ft n and 830 ft w se cor sw¼ ne¼ of sec.

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
NATCHITOCHES PARISH—		
Dr. H. S. Gerson et al, Smith 3, 11-10-8w	*	540
RED RIVER PARISH—		
Petroleum Ind., Inc., Madden 1, 21-14-10	*	2905
SABINE PARISH (Zwolle)—		
Coates Pet. Co., Stille 2, 35-8-13	15	2465
J. H. Askew, Henderson 2, 31-8-10	*	2657
J. B. Hughes, Johnson 1, 2-7-11	225	2504
Lee & Burnett, Travis 1, 13-7-11	†	2661
Pelican Nat. Gas Co., La. Long Leaf 16, 10-7-11	12	2627
Ben F. Smith, Turner 3, 4-7-11	1650	2244
Turnbow & Lacey, McNeely 1, 14-7-11	*	2633
H. H. Alvord, Steinhorst 2, 3-7-13	*	2450
WEBSTER PARISH—		
George Pearce et al, Ambrose 1, 22-20-10	*	3038

Wildcat Drilling Report

(Wells shut down not included)

BIENVILLE PARISH—Black Lake Dev. Co., Petty Stave Co. 1, nw nw 19-18-6w, dr 2224 ft. Robt. S. Ross, Beck 1, ne ne 3-18-8w, dk.

BOSSIER PARISH—Belmont Oil Co., Edwards 1, sw ne 12-18-12, sd 1100 ft. A. W. Phillips, Tr., Oden 1, nw nw 4-18-13, 10-inch cas 100 ft. Plain Dealing O&G Co., Nattin 1, 14-22-14, dr 2960 ft. Steckol & Breazeale, Nattin 1, sw ne 15-22-14, wo cement to set 6-in. cas 2998 ft. Steckol & Breazeale, Nattin 2, nw ne 22-22-14, materials. Texana Oil Co., Alford 1, 10-18-11, dr 1125 ft.

CADDO PARISH—Caddo Prairie Dev. Co., Nicholson 1, ne sw 10-22-15, dr 1870 ft. Bolinger & Walker, Thompson 1, 16-22-14, materials.

CLAIBORNE PARISH—Webster O&G Co., Smith 1, 8-21-7w, dr 1400 ft.

DE SOTO PARISH — DeSoto Dev. Co., Nickie 1, 7-13-12, rig. Honeycutt O&G Co., Porter 1, 26-12-13, dr 2560 ft. Mrs. Aleene Ibach, Tr., Rambin Est. 1, nw ne 32-11-11, rig. E. T. Oakes, Johnson 1, 30-13-15, dr 4329 ft. Potter et al, Dowling Bros. 1, 31-14-14, sr to set cas, td 3068 ft. Walters & Nicholson, Jim Guy 1, 3-11-13, wosr, td 2767 ft. Warren & Craig, Wagner 1, 5-12-14, 10-inch 100 ft. Jack Whitson, Sanders 1, sw sw 19-11-13, dry at 1465 ft, dr 1895 ft.

GRANT PARISH — A. W. Phillips, Tr., Cameron 1, se ne 27-7n-3w, rig. Robichaux et al, Bradford 1, 16-9-1e, rig.

LINCOLN PARISH — Benedum & Trees, Dubach Lbr. Co. 1, se ne 25-20-4w, dr 2890 ft.

MOREHOUSE PARISH—Feazel & Kalil, Davenport 1, 28-21-6e, sd 2510 ft. H. W. Snowden, Meyers 1, ne ne 15-22-7e, 10-inch 40 ft, sd.

NATCHITOCHES PARISH — Allender & Rasmussen Oil Co., Cane River Valley 1, se se 61-6n-5w, dr 40 ft. J. B. Oil Co., Hankins 1, 67-10-7w, dr 525 ft. Natchitoches Pet. Co., Edenborn 1, 4-11-6w, sd 2220 ft. Saline Bayou Dev. Co., Bodcaw Lbr. Co. 1, 9-12-5w, dr 2610 ft. Texana Oil Co., Clark-Morse 2, 23-5n-6w, 6⅝ cas 3350 ft, td 3475 ft.

OUACHITA PARISH—Millhaven Gas Co.,

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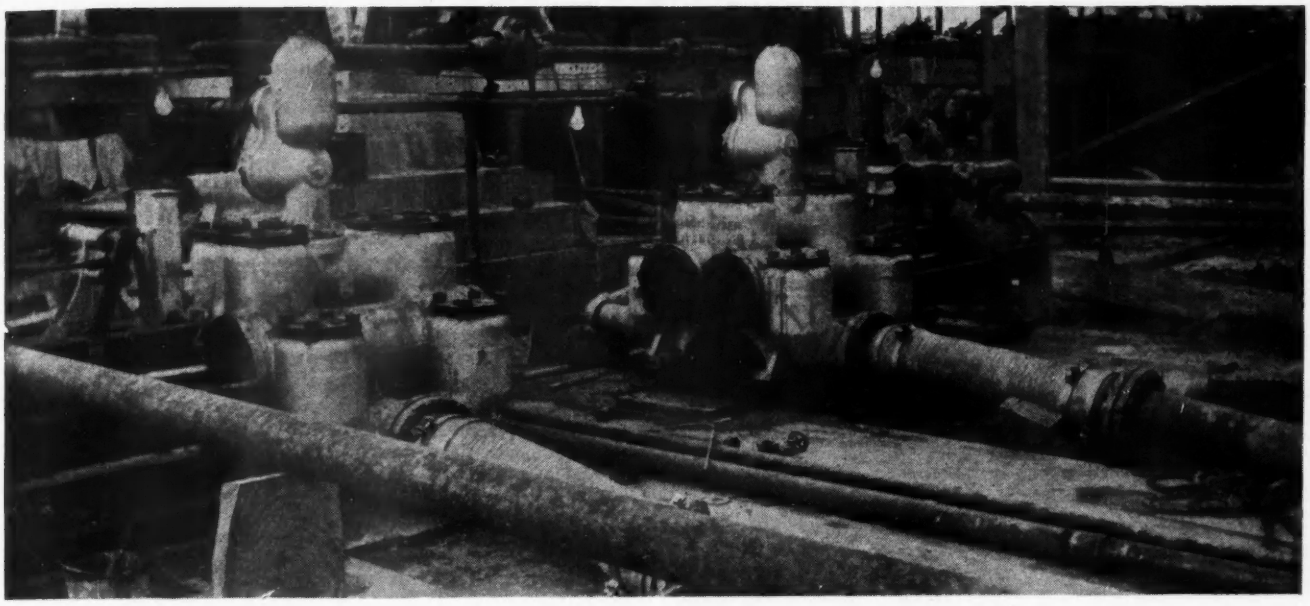

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West Va. L&T Co. 1, ne ne 10-17-5e, lcn. Monroe Oil & Roy. Co., Thieler 1, 34-18-2e, sd 2570 ft.

SABINE PARISH—Alford & Cleary Bros., Jackson 1, se nw 10-9-13, lcn. Alford & Cleary Bros., Patrick 1, sw ne 11-9-13, lcn. Alford & Cleary Bros., Patrick 2, sw ne 11-9-13, lcn. Barbare et al, Ryals 1, nw nw 27-9-13, rig. C. M. F. Oil Co., Aaron & Musser 1, nw nw 32-9-13, rig. R. L. Gay, Tr., Long-Bell A-1, nw nw 10-8-13, core 6675 ft. Gibson-Johnson & Higgins, Frost Lbr. Co. 2, 15-9-13, 6⅝ cas 1484 ft, td 1516 ft. Roshko Labarre, Maines 1, se ne 35-8-11, sp dr 100 ft. Lee & Burnett, A. J. Burkett 1, nw sw 10-9-13, sp 10-inch 61 ft, dr 400 ft. LeGrand & Jackson, McGough 1, 2-8-10, sd 2200 ft. C. D. Loe, Tr., Whitney Corp. 1, nw ne 12-9-14, sp dr 500 ft. Loring Oil Co., Bowman-Hicks 21, 16-7-12, elev 247 ft, dr 4590 ft (5000 ft test). H. C. Maulding Moores 1, 16-7-13, wo 2490 ft. Ben Merritt, Lucius 1, sw ne 4-5n-12w, dk. M. W. Ransom, Simpson 1, 30-7-10, dk. Rockmill et al, Bowman-Hicks 1, ne nw 36-9-14, dk. Sabine Prod. Co., Whitney Corp., 1, sw sw 4-9-13, sp dr 610 ft. Sandfield Oil Co., Bowman-Hicks 1, ne ne 26-9-13, elev 302 ft, 8¼ cas 1707 ft, td 1709 ft. Service Drilling & Roy. Corp., Whitney Corp. 1, se se 32-10-13, move in rig. E. M. Self, G. I. Paul 1, ne sw 9-9-13, dk. Simmons et al, Fleming 1, se se 11-8-13, rig. C. W. Smith et al, Pattison 1, 30-10-11, rig. W. M. Ungerman, Cross 1, sw se 25-8-11, rig. Ben Youngblood et al, A. J. Burkett 1, ne nw 10-9-13, dk.

WEBSTER PARISH—Silvey et al, Drake 1, 14-19-10, dk.

WINN PARISH—P. V. T. Oil Co., Southern Adv. Paper Co. 1, nw sw 28-13-5w, wo cas 1125 ft.

UNION PARISH—E. S. Goens, Frost Lbr. Co. 1, 17-22-2e, rig. Wing Hong, Tr., Union Sawmill 1, se se 15-22-1e, 10-inch 70 ft. Wingfield et al, Union Sawmill 1, sw sw 27-23-1e, rig.

WEST CARROLL PARISH—Mamie S. McCurrie et al, Richardson & Donnan 1, 13-19n-9e, rig.

ARKANSAS FIELDS

Second Location Made for Big Wildcat Acreage Blocks

El Dorado, Ark.—Mrs. Mamie S. McCurry, who is associated with W. D. Wingfield and others in four wildcat blocks in the south edge of Arkansas and in Union Parish, Louisiana, around the small abandoned Oakland oil field, discovered in 1923, last week ran derrick pattern for Rowland 1, SW SW Section 9-19-11, Union County Arkansas, a wildcat, the second definite location picked on two blocks of four which these operators have assembled for as many tests.

Outlet Reestablished for Urbana Field Production

El Dorado, Ark.—Oil is being run again from the Urbana field of Union County, Arkansas, which was without connections for several months. Wilson and Chapman and Marine Oil Company have the bulk of the production there. Pipe line runs average approximately 1400 barrels daily at present.

Arkansas Field Developments

New Operations

UNION COUNTY—Mamie S. McCurry et al, Rowland 1, 200 ft n and e sw corner sec 9-19-11.

Wildcat Drilling Report

(Wells shut down not included)

CLEBURNE COUNTY — Fred S. Craver, Donithan Lbr. Co. 1, sw sw 34-11-9, dr 2200 ft.

COLUMBIA COUNTY — Kendall Oil Co., Fullenwider & Kitchen 1, ne ne 13-17-22, sd 2450 ft.

DREW COUNTY — Cooperative Dev. Co., Ogles 1, 35-13-5, sd 3370 ft.

LAFAYETTE COUNTY—Fox & Langford, Coleman Bros. 1, se se 25-16-25, dr 1985 ft. Chas. McDonald, Allen 1, 11-19-26, dr 1780 ft. Sam Wilson, Jr., Smith 1, nw se 24-19-25, rig.

LITTLE RIVER COUNTY — American Portland Cement Co., Fee 1, sw ne 21-12s-32w, dr 120 ft. M. E. Sanderson, Hale 1, se se 22-12s-29w, dr 1020 ft.

MILLER COUNTY — Dennis & Cubbage, Head 1, sw sw 20-15-26, dr 2590 ft. Duluth-Ark. Oil Co., Buck 1, nw sw 34-15-26, sp, sd 1000 ft. Fitzwater et al, E. L. Beck 2, sw se 33-15-26, rig. Fitzwater et al, C. J. Norsen 1, se sw 20-15-27, sd 1945 ft. Fitzwater et al, Fouke 1, ne ne 11-17-27, 10-inch 105 ft. Goodwin et al, McCowan 1, nw se 22-15-28, 10-inch 100 ft. W. S. King, E. L. Beck 1, ne nw 35-15-26, dr 3200 ft. Lenz et al, Arthur Dean 1, nw se 19-15-25, dr 2545 ft. Jno. C. Rogers, Price 1, 17-16-25, rig. Bob Simmons, Lamb 1, 14-16-27, dk pat.

ST. FRANCIS COUNTY—Kentucky-Ark. O&G Co., Inc., Britton 1, ne nw 1-4n-1e, sd 3700 ft.

WOODRUFF COUNTY—B. F. Thompson, Rosser 1, se se 7-5n-2w, sp 10-inch 200 ft, dr 400 ft.

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NEW MEXICO . . . ROCKY MOUNTAIN

Usually This Season Stops Drilling But Canadians Are Unusually Busy. Cut Bank Has Completions Pending.

New Operation Unusually Active Across Border

Calgary, Alta.—In spite of the fact that at this time of year most drilling operations at wildcat locations are shut down for the ensuing winter, there are more new operations being started up by major operators on Canadian structures than for many months past. All are in the Alberta plains region. The Nordon Corporation and C. A. Roney will drill a joint test on the Twin River structure, L.S.D. 12, Section 2-2-20, some six miles north of the international line.

Frontier Development Company, a Canadian subsidiary of the Fisher & Lowrie and Humphreys interests of Denver, Colorado, will drill a test on L.S.D. 2, Setion 1-55-13, on a structure 325 miles north of the Twin River test. Contract has been let to the Sheldon-Burden Company of Canada which drilled the rotary test on Milk River structure for Milk River Petroleum Corporation.

Several miles down the Athabaska River from the site of the Mirror Landing well the Athadome Oils, Ltd., will drill a test 150 miles north of Edmonton and some 450 miles north of the international boundary.

It is believed that the Canadian demand for $55,000,000 worth of petroleum products annually has given the impetus to this exploration. At present Canada supplies less than five per cent of her annual requirements.

Lakota Showing in Big Muddy Field Interesting

Glenrock, Wyo.—Ohio Oil Company reports an interesting showing in Kinney 25, in the Big Muddy field, east of Casper, which had shut down in the Lakota formation at 4326 feet and rig skidded to No. 26. On the morning of November 3 the hole was reported full of oil and slopping over the casing. The company announced that it was changing to cable tools to swab. Last week the well had showed nothing worth while and it was decided to complete No. 26 in a shallow sand before deepening No. 25 to the Lakota.

Altogether there have been only five wells drilled to the Lakota sand in Big Muddy field. Midwest Refining Company drilled the first one about eight years ago. Two years ago Continental Oil Company and Ohio Oil Company each completed a producer in this sand. This summer these companies again started tests to the Lakota; Continental Oil Company's well found nothing that appeared to be worth while, and has continued deeper with the Sundance sand as the objective. Ohio Oil Company reported no showings in the Lakota, but before deepening decided to drill the shallow producer. The surprising results detailed above followed.

Cut Bank Wildcat Drills Into Oil Sand; 2750 Feet

Cut Bank, Mont.—There was considerable excitement here this week when the Montana Power Company wildcat well two miles northeast of the city limits drilled into an oil sand at 2750 feet. The hole filled up 1000 feet with oil immediately, and a string of 6⅝-inch casing was run and cemented before drilling in deeper to test. This well adds a very large extension to the proved oil sector of the field; it is five miles southeast of the R. C. Tarrant Haglund 1 producer, and so near the town of Cut Bank that residents are talking about "town lot drilling" in a manner reminiscent of California and Oklahoma fields.

The well is known as Simereo 1 and is in the center of the north half of Section 5-33-5w.

The Cut Bank field is rapidly becoming one of the largest in the Rocky Mountain States in point of proved gas and oil territory, and it has already achieved the distinction of being the most active in number of drilling wells.

Two more completions in the oil area and one in the gas territory are expected within another week.

The Kenneth Davis interests will build an additional two-still plant at the refinery west of Reickhoff 1 in order to more adequately care for the demand of neighboring farmers and truckmen who depend upon this skimming plant for gasoline and distillate.

Montana Power Company has let a contract to the Stearns-Rogers Manufacturing Company of Denver for the construction of a large gasoline absorption plant four miles east of the town of Cut Bank. It will recover gasoline from the natural gas piped from the Cut Bank field through the long line to Butte, Helena, and other cities and towns in the central and southwestern part of the state.

Denver, Colo. — Ramsey Petroleum Company's Tighe 1, Section SE 15-7n-59w, in the new Raymer-Buckingham district in Weld County, Northeastern Colorado, is blowing seven million cubic feet of gas from what is presumed to be the Muddy sand topped at 6686 feet with the hole bottomed in the same formation at 6695 feet. Along with the gas is a considerable spray of high gravity oil. It is planned to drill the hole a little deeper before making a production test. This test is unique in that it was completed to the top of the Muddy with only the surface casing set. It has been drilled entirely with rotary equipment. The location is 13 miles northeast of the nearest producing wells at Greasewood Flats.

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HOUSTON, TEXAS

Rocky Mountain Field Developments

COLORADO

Wildcat Drilling Report

ADAMS COUNTY—Hills Dome Lease Dev. Co., se 27-3s-68w, cem off caving 4119 ft.

DELTA COUNTY—Black Canyon O&G Co., Lot 12, 5-15s-94, install larger rig 330 ft.

ELBERT COUNTY—J. M. Botts, se 7-8n-58w, dr, but refuse report on depth below 4200 ft.

EL PASO COUNTY—Gulf States Oil Corp., Carson 2, ne 10-16s-66w, dr out plug 2000 ft.

LA PLATA COUNTY—McGarr Pete Co.'s Pinon Mesa 1, ne 34-33n-12, rig up. J. W. Irwin & Co., Doescher 1, nw 29-33-13, dr out plug, small show, to dd 3171 ft.

LAS ANIMAS COUNTY — P. W. Harr, Schneider 1, sw se se 10-33s-63w, completed contract, to dd 2010 ft.

LINCOLN COUNTY — Eastern Colo. Oil Corp., State 1, nw 36-14s-57w, hfw from Dakota 3464 ft.

MOFFAT COUNTY—W. A. Myers et al, sw sw 16-4n-101w, dr bel 3300 ft.

MONTROSE COUNTY—Uncompahgre O. & G. Co., Vandemark 2, 27-50n-10, resume 800 ft.

ROUTT COUNTY—Mid-Colorado Pete Co., Omholt 1, se 29-4n-87, cem cave, est 2M gas at 1917 ft.

WASHINGTON COUNTY — Akron O&G Co., Gilcrist 1, 22-3n-53, bldg dk.

WELD COUNTY—Reiter-Foster Oil Corp., Wilson 1, ne se 24-6n-61w, rigging up rotary 400 ft. Ohio Oil Co., Butters 1, 7-6n-60w, testing Muddy 6684 ft. Ramsey Pete Co., Tighe 1, sw ne se 15-7n-59w, 6M gas spraying oil, td 6695 ft.

NEW MEXICO

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
EDDY COUNTY—		
Leonard & Levers, State 8, se 21-17s-29e	¶5	2280
LEA COUNTY—		
Shell Pet. Corp., H. D. McKinley 3-B	¶8-15,600	4207
Gypsy Oil Co., East Grimes 2, se ne 33-18s-38e	¶6¼-4470	4163

Wildcat Drilling Report

(Wells shut down not included)

BERNALILLO COUNTY—Norrins Realty, Pajarito Grant 1, 22-9n-1e, standardizing 3559 ft. Norrins Realty, Galegas Grant 1, 19-11n-4e, dr 100 ft.

CHAVES COUNTY—R. D. Compton, sw se 20-10s-24, sd to hunt deer, td 1730 ft. Warman Oil Trust, Weldon & Hoar, se 9-14s-25e, rigging up.

DeBACA COUNTY — Landowners Oil Co., State 1, ne 16-1s-27e, dr in lime 5183 ft.

DONA ANA COUNTY—Middle States O&G Co., Boretzi 1, 14-36-5e, rig up. Viking O&G Co., sw nw 26-35-5e, dr bel 250 ft.

GUADALUPE COUNTY—N. M. Prod. & Ref. Co., McMillan 1, 24-5n-16e, wait for orders 4507 ft. N. M. Explor. Co., Ltd., Anton Chico Grant 1, sw 20-9n-17, dr 350 ft.

RIO ARRIBA COUNTY — Pan State Oil Co., 26-3s-1e, rigging up.

ROOSEVELT COUNTY — Peterson et al, Good 1, se nw 32-5s-30e, rig up.

SAN MIGUEL COUNTY—Cabra Springs O&G Co., Thompson 2, ne 22-12-22, dr in 18-inch hole 380 ft.

SANTA FE COUNTY—Kelsey Clients Dev. Est., 1, 26-10n-10e, try for wso 790 ft, td 925 ft.

SOCORRO COUNTY—J. C. Green et al, 1, 14-2n-5w, stand 300 ft.

VALENCIA COUNTY — Homer G. Mills, Inc., Tome 1, nw sw 29-6n-3e, sd 500 ft. Western Nat'l Resources Corp., Inc., San Clemente Grant 2, ne 5-6n-1e, dr 1900 ft. Gravity Petroleum Co., Clara R. Reed 1, 30-11n-9w, cellar completed.

MONTANA

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
BROADWATER COUNTY (Winston Structure)—		
Capitol O&G Co., 1, se nw 7-8n-1e	*	2002
CASCADE COUNTY (Black Horse Lake Structure)—		
Charles Merz, Sheffels 1, se nw 4-21n-4e	*	1865
FALLON COUNTY (Cedar Creek)—		
McDonald et al, sw 28-8n-60e	*	1930
MUSSELSHELL COUNTY (Devil's Basin)—		
Laffae Oil Co., 2, nw se 6-10n-25e	*	1150
YELLOWSTONE COUNTY—		
Spokane-Laurel Oil Co., sw se 30-2s-24e	*	1665

Wildcat Drilling Report

(Wells shut down not included)

CARBON COUNTY—Corbett Royalty Co., sw se 1-6s-23e, dr 1225 ft. Jack Creek O&G Co., 2, se 15-7s-23e, dr 1235 ft.

FERGUS COUNTY—Melton Corporation, 1, sw 24-21n-17e, ur 6¼ inch for wso, to dd from 3305 ft.

GALLATIN COUNTY — Montana Gas & Pete Corp., Adams 1, 25-1n-2e, dr 1700 ft.

GLACIER COUNTY—Tarrant et al, Yunck 1, nw nw 12-34-6w, dr 2750 ft. Tarrant et al, Reickhoff 1, ne 3-34-6w, preparing to put on pump to test 2962 ft. Montana Power Co., Simereo 1, n½ 5-33n-5w, 6⅝ inch run to test at 2750 ft.

GOLDEN VALLEY COUNTY—Golden Valley Oil Co., 2-6n-22, co after set 8¼ inch at 3400 ft.

HILL COUNTY—Fargo Oil & Gas Co., 29-37n-15e, sd 875 ft.

LIBERTY COUNTY — Peoples O&G Co., nw 17-35-6e, dr 2770 ft. Dohm et al, Millen 1, sw 10-37-5e, fsh 295 ft.

SWEETGRASS COUNTY—Shoshone Consolidated Oil Co., nw nw 23-2n-15e, dr bel 6000 ft.

TOOLE COUNTY—Liquid Gold Oil Co., 1, 25-36-1e, stand cem at 2500 ft, td 2660 ft.

VALLEY COUNTY—Opheim O&G Co., ne 28-37n-38e, sd temp., 1000 ft.

YELLOWSTONE COUNTY—Peter Antonioli, ne ne 2-2n-25e, casing on hand, ready to run 2370 ft. Rice Fulton et al, 20-2n-23e, spudding.

WYOMING

New Operations

CARBON COUNTY (Dutton Creek field)—Mutual Oil Synd., 26C, ne 1-18n-78w.

NATRONA COUNTY (Poison Spider Field)—Empire State Oil Co., ne 12-33-83.

PARK COUNTY (Frannie field)—Continental Oil Co., sw ne 23-58n-98w.

WESTON COUNTY (Osage Field)—Yellowstone Petroleum Co., 3, nw ne 23-46-64.

CARBON COUNTY (Allen Lake)—Ohio Oil Co., Kanawaka 1, 34-23n-79w.

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
CARBON COUNTY (Dutton Creek)—		
Mutual Oil Synd., 27, se ne 12-18n-78w	¶4¾	1831
FREMONT COUNTY (Pilot Butte)—		
Big 4 Oil Co., se sw 27-3n-1w	25	794
CONVERSE COUNTY (Morton Ranch)—		
John Ackard 1, nw se 24-33n-72w	*	2100

Wildcat Drilling Report

(Wells shut down not included)

CROOK COUNTY—St. Onge O&G Co., ne se 20-53n-61w, dr 450 ft. McWethy et al, 1, 1-49n-67, dr 600 ft. Holden & Lawrence Refining Co., nw sw 25-39-67, mvg in.

FREMONT COUNTY—Ward O&G Co., 28-34-90, fsh bit at 2100 ft, td 4050 ft. Yellowstone Oil Co., Gabus 1, sw 14-38-94w, sd temporarily by accident 2210 ft.

LINCOLN COUNTY—H. C. Harris et al, se 14-21n-117e, stand in gray lime 1507 ft.

NATRONA COUNTY—Mutual Oil Synd., Midway 2, sw se 14-36-79, co to test 6085 ft. Summit Oil Co., Trevett 1, 21-33-80, dr around 1690 ft.

PLATTE COUNTY—T. B. Oberman, nw se 30-21-68, new hole after skidding rig.

WASHAKIE COUNTY—Bales Oil Trust, Brome 1, ne nw 13-48n-90w, testing 1430 ft.

WESTON COUNTY—Julius Peters et al, Weitzell 1, nw 30-46-64, completed cleaning out, testing, probably good for 50 bbls., 4590 ft. Gose Synd., ne 28-37n-63w, ur 6-inch, td 5050 ft. Voorhees et al, se sw 26-48n-64, ready to spud.

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Southeastern States

Washington County Test Checks Formations Lower

Jackson, Ala.—South Alabama Oil & Gas Company's St. Stephens A-1, Section 26-7n-1w, Washington County, Southwest Alabama, on the downthrow side of the Jackson fault, checked 1207 feet lower on top of the Selma chalk than did Danciger Oil & Refining Company and associtates' Everett & Boykin 1, Section 33-6n-2e, Clarke County, Alabama, which was exceedingly high. South Alabama Oil & Gas Company's test logged Selma chalk at 2030 feet; elevation is 87.2 feet. The test checks normal. At present it is shut down at 2242 feet in chalk.

There were small oil shows at base of the Claiborne at 494 feet and in the Midway-Ripley at 1700 feet, besides a gas show that burned with a red flame in the Ripley at 2208-30 feet.

Shreveport Geologists Talk "Conroe Trend" at Meeting

Shreveport, La.—The "Conroe trend" through central Louisiana was the topic discussed at the November meeting of the Shreveport Geological Society, November 4. E. B. Baldwin, geologist in southeast Texas for Arkansas Natural Gas Corporation, read the main paper on the subject, with corollary talks by Dugald Gordon of Brokaw, Dixon, Garner and McKee, and by S. G. Gray, field geologist for The Texas Company. An interesting discussion among the 42 members present followed.

President George W. Schneider, The Texas Company, was authorized to appoint a committee to select a suitable geological exhibit from the Shreveport territory to be displayed at the World's Fair at Chicago in 1933.

Mobile, Ala.—Torsion balance work that has been under way for several months by Lowrie and Fisher on a block estimated at 200,000 acres near Chatham, Alabama, has been completed.

Southeastern States Field Developments

MISSISSIPPI
Wildcat Drilling Report

(Wells shut down not included)

HINDS COUNTY—Love & Lancaster, Elton Plantation 1, 17-4n-1e, elev 260 ft, dr 3720 ft.

JASPER COUNTY — L. Spraragen et al, Bank of Philadelphia 1, se se 35-3n-12e, 15¾ cas 161 ft, dr 300 ft.

LAMAR COUNTY—Stauffer & Kouri, Trs., Bond 1, sw ne 18-2n-14w, elev 364 ft, arr lub to recover hung ds, td 3026 ft. Dr. Chas. Gorr et al, Jordan 1, nw sw 1-2n-15w, dk.

ALABAMA
Wildcat Drilling Report

(Wells shut down not included)

LAMAR COUNTY (Vernon)—P. J. McAlpine et al, Gardner 1, nw nw 22-15s-17w, dr 3350 ft sandy shale.

MARENGO COUNTY—Joseph Bruner et al, Nolan's Store 1, 23-14n-1e, lcn; Fee 1, 36-14n-2e, lcn.

MOBILE COUNTY—J. C. Prine et al, M. & O. Ry. 1, se ne sw 33-2n-4w, dr below 3540 ft.

WASHINGTON COUNTY—South Ala. O. & G. Co., St. Stephens A-1, 26-7n-1e, sd 2242 ft chalk.

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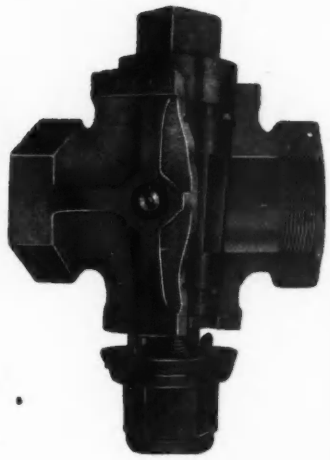

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COMPTON CALIFORNIA

Humble Aggressive in Concordia Parish Leasing

Shreveport, La.—Humble Oil & Refining Company which is leading in the wildcat leasing campaign across central Louisiana between the Angelina-Caldwell flexure and the Gulf Coastal plain, and in which Shell Petroleum Corporation, The Texas Company, Sinclair Prairie Oil & Gas Company, as well as a number of smaller concerns, are now joining, has begun to lease on a wide scale in Concordia Parish, north of a gas field which produces from the Jackson.

Humble Oil & Refining Company's activity in this parish is largely in townships 6 and 7 north, ranges 8, 9 and 10 east. This company has a large block in Wilkinson County, Mississippi, which borders Concordia Parish to the east across the Mississippi River.

Plan Deep Test Southeast Mississippi Acreage Block

Jackson, Mississippi.—Eastman-Gardiner Lumber Company of Laurel, Mississippi, which owns in fee vast tracks of cut-over and pine timber land in southeast Mississippi, has completed 20 core tests sunk to the Catahoula Vicksburg-Jackson contact, and is planning a deep test on that part of its holdings in Covington County, near Collins.

MICHIGAN FIELDS

Acid Makes Good Producer Out of Abandoned Well

Mt. Pleasant, Mich.—T. K. Buzard's Mahon 1, Isabella County, Isabella township, Section 24, a well plugged as dry several months ago, flowed 368 barrels of oil in 21 hours after being cleaned out and run with a special acid limestone solvent solution. The well made 200 barrels the second 24 hours and is continuing to flow from 100 to 175 barrels a day.

This is the first instance in Michigan at least where an abandoned well has been re-worked with commercial success.

In the east field of the Central Michigan proven area, Braden-Saunders' Stapleton 3, Midland County, Greendale township, Section 13, completed in September for 210 barrels a day, was boosted to 1700 barrels a day this week when treated with the acid limestone solvent.

From the standpoint of commercial production the past week stands as the lightest in Michigan for several months. Gordon Oil Company's Talker 2, Midland County, Lee township, Section 7, located on the extreme east edge of the proven Central Michigan field was completed for five barrels in the Dundee limestone. Attempts to boost production by shooting and running acid failed.

Theodore Oil Company's McBain 1, Midland County, Greendale township, Section 1, located in semi-wildcat territory, north of the proven field, is being plugged at 3618 feet. A light show of gas and oil was picked up in the Dundee at 3569-74 feet.

In Oceana County on the west side of the state where considerable development was started following a Traverse formation oil strike at 1900 feet on Oscar DuVall's Weirich 1, Elbridge township, Section 31, August, 1932, received a setback this week when A. S. Cochran's Hannum 1, an offset in the same section, was drilled into salt water at 2100 feet. The well has been shut down pending a decision as to the advisability of drilling deeper.

40-Mile Gas Line Planned To Serve 8 Communities

Mt. Pleasant, Mich.—Natural gas franchises are being asked in eight Central Michigan towns, Shepherd, Alma, Ithaca, St. Louis, Breckenridge, Wheeler, Merrill, and Hemlock, having a combined population of 10,000 persons, by Lee S. Miller and J. P. McCloskey, former gas engi-

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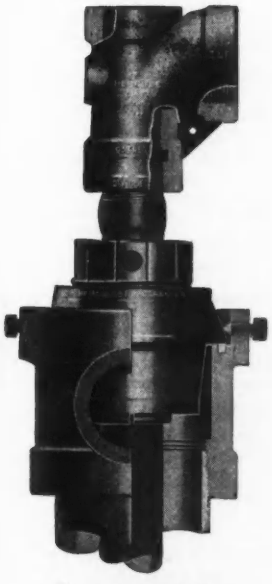

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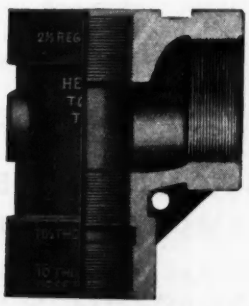

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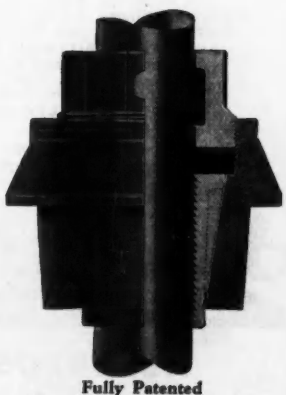

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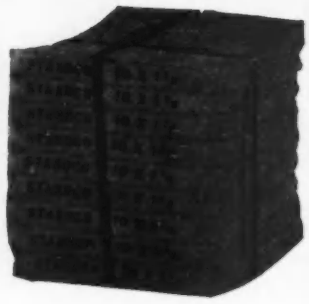

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neers of Tulsa, Oklahoma, who are acting as trustees for a company to be set up later, according to Mr. Miller who this week appeared before the Shepherd village council with the gas proposal.

Miller said that if the franchises are secured the company will be organized immediately and go ahead with building a 40-mile gas line from the Central Michigan field. He said the projected company was amply financed but declined to state who its financial backers were.

Miller and McCloskey said the line would be started next spring if the franchises and pipe line permit are granted. They headed the engineering staff of the Peninsular Construction Company of Detroit, which at one time contemplated building a gas main from Central Michigan to Detroit.

Mt. Pleasant, Mich.—A permit for the laying of a double pipe line in Wayne County, Michigan, has been granted by the Wayne road commission to Detroit Southern Pipe Line Company. It is planned to lay the double six-inch line to carry gasoline from refineries in Toledo, Ohio, to Detroit, approximately 70 miles.

Michigan Field Developments

Completions

Company, Well and Location—	Initial Production Bbls.	Depth
ISABELLA COUNTY—		
Mellon Pollock Oil Co., Lynch 1...	75	....
MIDLAND COUNTY—		
Gordon Oil Co., Talker 2, Lee Twp, nw sw sw sec 7.....	5	3554
Pure Oil Co., Reed 5.....	100	....
Harnick A-1 1300		....
Purtell 6	50	....
Theodore Oil Co., McBain 1, Greendale Twp, se se sw sec 1	*	3618
OCEANA COUNTY—		
A. S. Cochran, Hannum 1, Elbridge Twp, sw ne sec 31	*	2100

New Operations

MIDLAND COUNTY—Columbia Oil & Gas Co.'s McLaughlin 4, Greendale Twp, sec 15, sw sw nw.

ST. CLAIR COUNTY—Snavely-Craft's Norman 1, Grant Twp, sec 22, ne ne nw.

WEXFORD COUNTY—Oil Properties Corp.'s McNitt Estate 1, Haring Twp, sec 10, sw ne se.

Wildcat Drilling Report

(Wells shut down not included)

MIDLAND COUNTY—Pure Oil Co., Yost et al's 1, Greendale Twp, sec 35, dr 1450 ft. Michigan Gas & Oil Co.'s Rayner 1, Lee Twp, sec 6, fr 3540 ft.

CLARE COUNTY—Theodore Oil Co.'s Thompson Bros. 1, Greenwood Twp, sec 35, dr 3500 ft.

GRATIOT COUNTY—J. G. Tiplady's Laycock 1, Arcada Twp, sec 11, dr 800 ft.

MUSKEGON COUNTY—H. C. Nelson's Waller 1, White River Twp, sec 14, dr 1700 ft.

SAGINAW COUNTY—Webber's Kirchner 1, Tittatabwse Twp, sec 15, dr 4200 ft.

NEWAGO COUNTY—Hesperia Petroleum Co.'s Jones 1, 14n-14w, sec 20, dr 2550 ft. Newago Oil & Gas Co.'s Bates 1, 13n-13w, sec 12, bailing water, 5900 ft.

Central Michigan Output Value Nears Eight Million

Mt. Pleasant, Mich.—On the basis of returns to Isabella and Midland Counties from the state oil and gas severance tax, which is two per cent of the price of oil per barrel and gas per 1000 cubic feet at the well, oil and gas production in the two counties since the Central Michigan field was opened three years ago up to July 1, 1932, had reached a value of approximately $7,898,250.

To date Isabella County and Midland County have been returned by the state approximately $94,779, while the state has benefitted about $63,186 by the tax. The tax is distributed as follows: 40 per cent to the state, 40 per cent to the townships in which oil or gas is produced and 20 per cent to the county with production.

Exclusive of the amounts received by the townships, for the first half of this year, Isabella received $1,292.99, a decrease of $400 as compared to the last half of 1931. Midland County's share was $5,230.40 for the first half of this year, an increase of $2000 over the last half of 1931.

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EASTERN STATES

Eastern States Field Developments

Completions

PENNSYLVANIA

Company, Well and Location—	Initial Production Bbls.	Depth
BUTLER COUNTY—		
Hudson Bros., Hartley 1	*	450
WASHINGTON COUNTY—		
Rendall & Co., Arnold 1	*	909
Bromley & Bungard, Clark 1	3	909
E. H. Tague & Co., Cox 1	4	900
Raymond Orrill, Hazlett 2	70	2800

WEST VIRGINIA

CALHOUN COUNTY—		
W. Bickerstaff, Haddox 2	¶½	2014
GILMER COUNTY—		
A. E. Ellis & Co., Engle Hrs. 1	40	1959
KANAWHA COUNTY—		
Butler County Natl Bk & Tr, Goshorn 1	¶½	960
ROANE COUNTY—		
Bowers & Jackson, Smith & Chewinning 1	¶¼	2031

SOUTHEASTERN OHIO

MONROE COUNTY—		
Lucas & Thornberry, Swick 1	10	1466
WASHINGTON COUNTY—		
R. W. Turney, Rowland 2	*	637

CENTRAL OHIO

ASHLAND COUNTY—		
Stewart & Co., Austin 4	¶¼	576
ATHENS COUNTY—		
Robinson Bros., Lunch 1	¶¼	....
GUERNSEY COUNTY—		
E. C. Quillan & Co., Hamilton 1	25	3595
Ohio Fuel Gas Co., Decker 1	¶¼	3366
HURON COUNTY—		
Palmer & Co., Palmer 1	*	410
HOCKING COUNTY—		
City Natural Gas Works, Orendorf 1	¶¼	2377
LORAIN COUNTY—		
Ramage & Willis, Morgan 1	*	....
MUSKINGUM COUNTY—		
Hopewell Oil & Gas Co., Middleton 1	¶4½	....
The Atha Co., Bryan 5	4	3159
MEIGS COUNTY—		
Joseph Rubin & Co., Koenig & Co. 1	¶¼	919
KNOX COUNTY—		
Bonnett & Co., Engle 2	*	624
STARK COUNTY—		
East Ohio Gas Co., Harris 6	¶1¾	4446

NORTHWESTERN OHIO

AUGLAISE COUNTY—		
Adrian Tester, Hanold 3	5	....
DARKE COUNTY—		
William Witt & Co., Beatty 1	1	....
MERCER COUNTY—		
O. G. Sellers, Rindler 1	*	....
Masters Oil & Dev. Co., Hoening 2	1	....
SHELBY COUNTY—		
Eilerman Oil Co., Hurd 1	*	....

ILLINOIS

CRAWFORD COUNTY—		
Frank Allison & Co., Pleasant 1	5	1180

KENTUCKY

CHRISTIAN COUNTY—		
Unknown, Petch 1	¶2	....
DAVIESS COUNTY—		
Kentucky Natural Gas Co., Holbert 1	*	850
Creek Drilling Co., Cootz 1	*	1040
F. M. Ashby & Co., Simpson-Holbrook 1	*	....
HENDERSON COUNTY—		
Imperial Oil & Gas Products Co., Freeman 5	15	....
OHIO COUNTY—		
Charles Leeper, Tucker 1	125	....
H. L. Ogle & Co., Westerfield 1	*	....

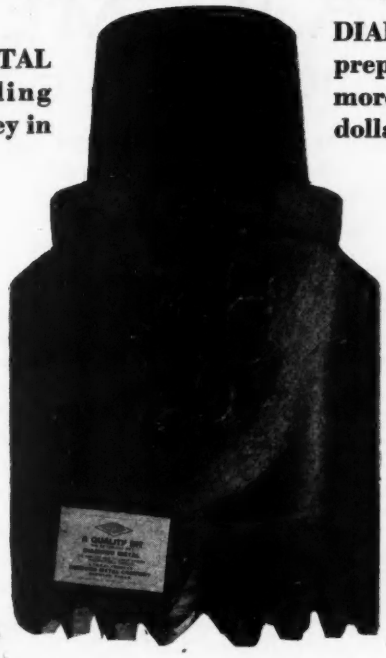
METAL DOLLARS

saved in 1932 will buy Metal in 1933

Many operators saved dollars on bit costs in 1932 by using DIAMOND METAL. Many more will save such dollars in 1933.

DIAMOND METAL is saving drilling companies money in two ways. First, it is *sold Net Weight*, eliminating cost of the binder. That, however, is not the important saving.

DIAMOND METAL prepares any bit for more footage per dollar invested.



This tough-hard metal, produced through a new and modern method, builds a bit edge which sharpens itself as it drills.

Properly set DIAMOND METAL puts teeth in bits, that are hanging up record after record for more footage of clean, straight hole.

LOOK AT THESE TEETH

This bit edge, resulting from DIAMOND METAL Inserts, was cutting better at the end of a single 1346-foot run than at the beginning, drilling hard lime and shale, and with less than 1/8" loss of gauge.

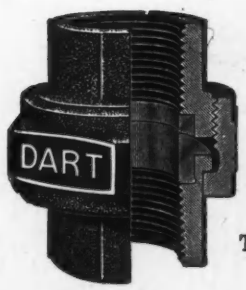
DIAMOND METAL COMPANY

3411-13 Harrisburg Blvd., HOUSTON, TEXAS

Export Agent: OILFIELD EQUIPMENT COMPANY, 30 Church St., New York, N. Y.

BRONZE TO BRONZE

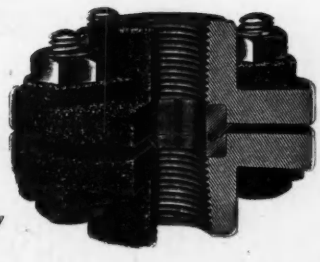
Is the Reason



DART UNIONS

Give Service
Try Them

E. M. Dart Mfg. Company
PROVIDENCE, R. I.
The Fairbanks Company
Distributors



ESTABLISHED 1906

J. H. McEVOY AND COMPANY
HOUSTON • TEXAS

A.P.I. MEN

YOUR IDEALS ARE OUR IDEALS

Among the great contributions you have made to the petroleum industry are advancement in standardization, and precision. From the time of our organization in 1906, this has been our guiding policy.

WE WELCOME YOU TO VISIT OUR PLANT

and see the various products we make, such as well strainer, casing heads, blowout preventers, packers, flow chokes, set shoe assemblies, etc.

You will likely be interested in seeing the NEW McEVOY MICRO-CHOKE, a piece of precision equipment which is now ready to be placed on the market. (The adjustment possible with this choke is about 20 times as accurate as was customary heretofore.)

•

MAKE YOURSELF AT HOME WITH US

at the

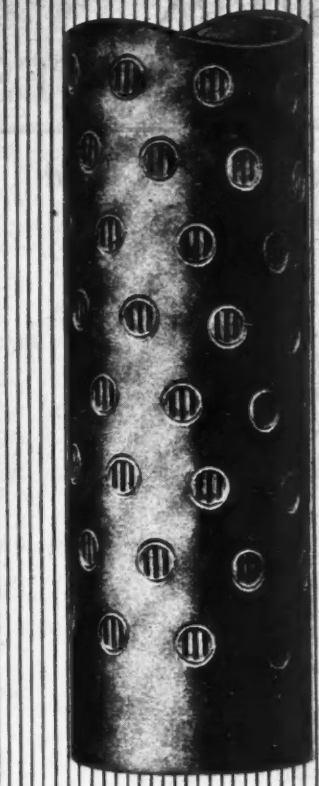
MILBY HOTEL

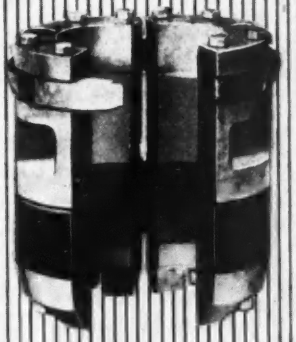
(Opposite the Rice)

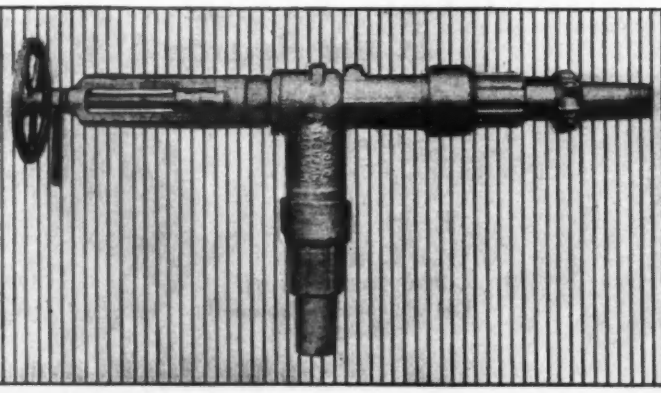
•

or TELEPHONE us Capitol 2288

***and we will bring you out in five minutes to our plant at* TEXAS AVE. *and* MILBY ST.**
(one block from Ford plant)







New Equipment for the Field
MACHINERY • TOOLS CATALOGS • BOOKS

▼ ▼ ▼

1. Rotary Draw Works

H. L. TURNEY

H. L. Turney, 2740 East 37 Street, Los Angeles, California, announces a new rotary draw works machine known as the "Turney 4-Speed Draw Works." While it is the first machine of its type completed, and is entirely different than the conventional draw works machine in every respect, it is not new in principle.

Many of the principles involved in heavy logging machines have been embodied in the new Turney draw works; such, for example, as the patented speed changing feature which has proved so successful in the gas and Diesel logging machines now in service. The Turney draw works has four line-speeds, the same as the conventional type of draw works. One of its outstanding and patented features is the variable speeds, by means of which the operator, or driller, can change the speed of the drum instantly to a higher or lower speed while under full load and with the engine running at high speed, without the slightest shock or jar to the hoisting line. This is accomplished by a series of very unique and specially designed air-operated clutches which are controlled through one control valve, permitting the operator to select any drum-speed desired while hoisting.

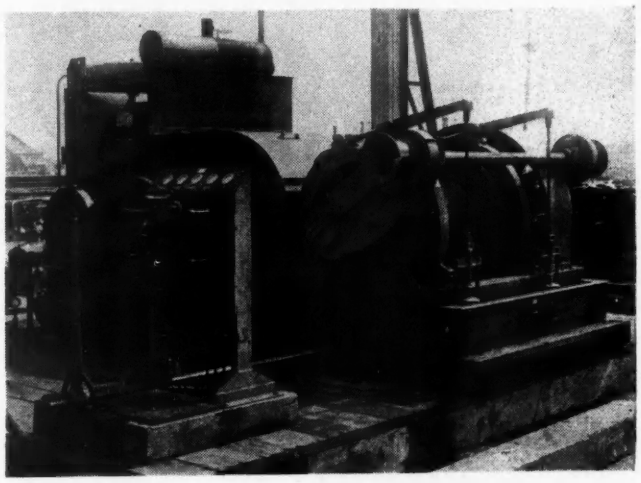
The drum, of standard capacity with water cooled brake flanges, is equipped with a specially designed type of air-operated "post" brake, controlled by a Westinghouse air valve, making it possible to apply or set the brakes with a variable air pressure of from a few pounds to full tank-pressure, resulting in a smooth stop of the drum, or accurate feeding off of the line when drilling. The line speed of the drum is variable from 300 feet per minute in low gear to 2200 feet per minute in high gear.

The table drive is equipped with air-operated band clutches of the same type as used in the transmission, and can be reversed instantaneously under full speed load. The speed variation of the table is from 15 revolutions per minute to 150 revolutions per minute.

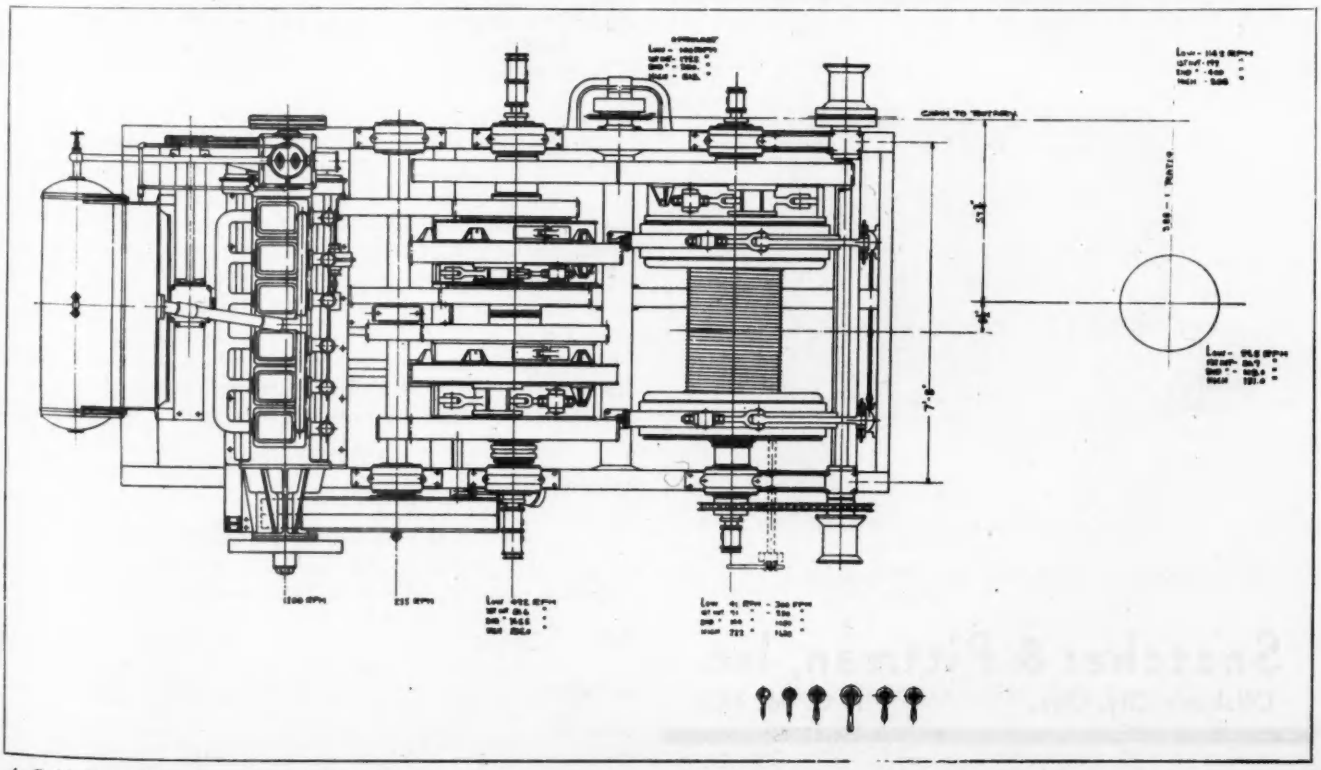
Cut-steel gearing is used throughout the machine, not chain drive. All shafts run in large roller bearings.

The machine illustrated is designed for deep drilling, and is powered with a 350 h.p. Waukesha natural gas engine, although either steam, electric or Diesel power may be used as desired.

A smaller unit for shallower wells will be produced in the



At right—Turney 4-Speed Draw Works, and below a diagram of its principles



GREENHEAD BIT

ITS RECORDS MADE IT FAMOUS

Pat. Pend.

Better engineering, special workmanship in the scientific application of hard surface metal and diamond like inserts, keeps bit true to gage at all times and drills a straight hole.

Ask Anyone Who Has Used One

Distributors in Mid-Continent Area

STANDCO ASBESTOS BRAKE LINING

Distributors, U. S. High Pressure Rotary Hose

Snetcher & Pittman, Inc.

Oklahoma City, Okla. P. O. Box 4327

near future, and the two sizes are said to adequately meet the requirements for drilling to all depths.

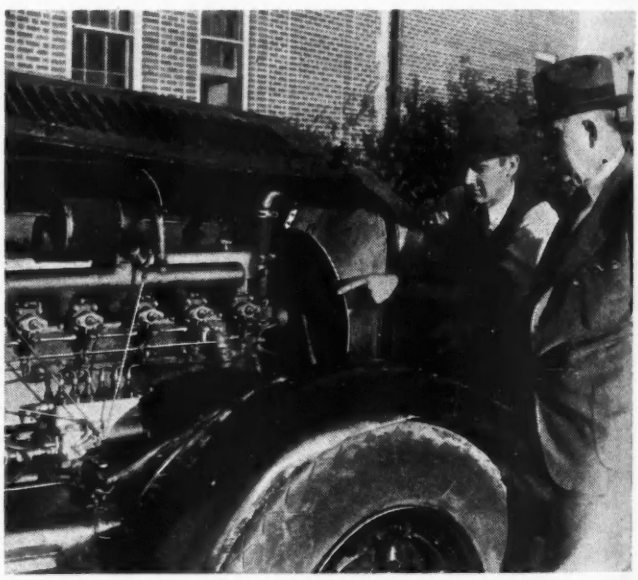
Among the advantages claimed for the Turney Draw Works are that it is compact, and a complete drilling unit that can be moved from one location to another at a saving in time and money; that it speeds up drilling, running-in and pulling out, and effects savings in drilling costs.

2. Diesel Truck Engine

THE GUIBERSON CORPORATION

The Guiberson Corporation at Dallas, Texas, has turned out a Diesel engine for trucks that on recent test pulled the truck and a trailer bearing a 14,000-pound load on the 250-mile run from Dallas to Oklahoma City at an average speed of 28 miles per hour, with an average fuel consumption of one gallon to five miles. The speed averaged, together with the fact that the fuel cost, at wholesale prices less tax, was less than 97 cents, is rather remarkable performance for this type of equipment.

On another test run from Dallas to Abilene, Texas, and return, the same speed was averaged under similar conditions of load, with the savings on fuel consumption amounting to 70 per cent of the cost when a gasoline motor was used.



Here is the truck motor which operates without spark plugs, carburetor, or ignition equipment. Burning ordinary furnace oil, which is fired by high compression in the cylinder heads, the engine pulls the truck at an average speed of 28 miles per hour, hauling a 14,000-pound load. In the above photo, Carl Spangenberger, chief engineer in charge of building the motor, is showing S. A. Guiberson, Jr., who made development of the engine possible, what makes it go

The engine used on these runs was a converted White truck motor, Model 64. All ignition equipment and carburetor accessories were removed and replaced with a single patented

— — — — — — *MAIL COUPON* — — — — — —

THE OIL WEEKLY,
Houston, Texas, U. S. A.

Please see that I am supplied, without obligation, additional information on New Equipment Items Nos. _____ described in the November 14, 1932, issue of THE OIL WEEKLY.

Name .....

Company .....

Address .....

unit which controls the fuel injection and timing so that the converted model weighed 100 pounds less than originally. Unlike ordinary Diesels, the Guiberson model used in the truck was provided with a foot accelerator.

Peak pressure in the cylinder head is 1400 pounds, with a compression ratio of 14:1. Operating at the same r.p.m., the horsepower was increased from 97 to 104 with the Diesel conversion, with an equal efficiency on anywhere from 26 to 43 gravity oil without readjustments. The truck engine is started with a regular automobile starter, and it can be stopped only by shutting off the fuel.

Specifications of the new Guiberson L-6 Diesel conversion of the gasoline motor follow: Bore 4½ inches; stroke, 5¾ inches; displacement, 548.55 cubic inches; compression ratio, 14:1; maximum rated horsepower at 1850 r.p.m., 104.

Origin and Environment of Source Sediments

"Origin and Environment of Source Sediments" is the title of a book recently off presses of The Gulf Publishing Company of Houston, Texas.

Parker D. Trask of Oakland, California, the author, throws into the volume the result of five years research on the coasts of United States, Cuba, and South America, making also a trip to the capitals of Europe, including Russia, for the purpose of procuring samples from the collections of sediments obtained by scientific expeditions of various European governments. He was assisted in the research one year by C. C. Wu and two years by Harald E. Hammar.

The volume goes into a subject on which very little has been written, source rocks. In many regions operators are in the habit of drilling many additional wells on a structure after the first has proven dry. If by a study of well cuttings obtained in the first well they could determine that inadequate source material for oil is present, they could save the cost of the usual follow-up drilling.

Study of source sediments, incidentally, was one of the problems undertaken by the American Petroleum Institute as a result of the $250,000 donation by John D. Rockefeller for research on fundamental problems.

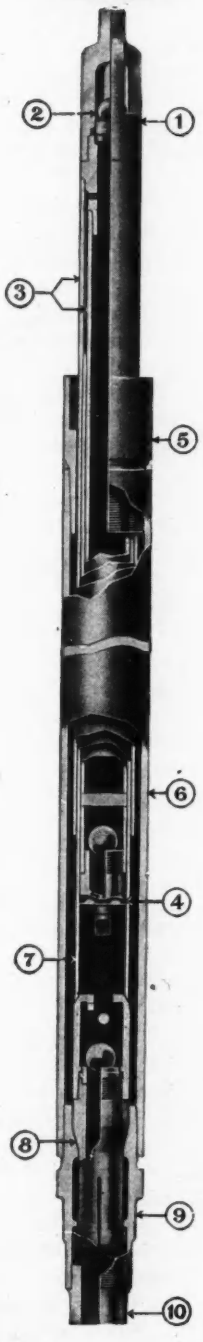
Geologists have reasoned *a priori* how shallow water sediments (near shores) have formed. Mr. Trask's book is an empirical study of how the sediments actually do form. The results indicate some of the notions obtained by *a priori* reasoning do not fit the observed facts. The work, for instance, shows that the shape of the sea floor in many cases is much more of a factor than either distance from shore or depth of water.

In addition to the above angles of research, the book presents an intensive study of the fundamental laws of deposition of sediments; one of the first studies of accumulation of organic matter in sediments; a rapid method of making mechanical analyses of fine-grained sediments, and a simplified method of presenting data of mechanical analyses; a detailed study of the distribution of calcium carbonate in sediments and information on the origin of calcareous deposits.

The book is, in short, a valuable compendium of empirical data on the organic content and the mechanical composition of sediments from 1580 localities scattered over the world.

The United States Bureau of Mines, Department of Commerce, Washington, D. C., has issued its "Report of Investigations Number 3182," dated October, 1932, which is a "Review of Fatalities in the California Petroleum Industry during the calendar year 1931." The report was prepared by R. L. Marek, associate petroleum engineer for the Bureau of Mines at its San Francisco office, and it consists of 22 single-spaced mimeographed pages.

Consistency
day in & day out



It's Consistent Performance That Counts . . . Both in The Product and in Field Service

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Other Patents Pending
Fpp

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Shreveport, Louisiana
Houston, Texas
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Pampa, Texas

FLUID PACKED PUMP COMPANY
(Mid-Continent)
2 S. E. Twenty-ninth Street
OKLAHOMA CITY, OKLAHOMA

Squeaks *from the* BULL WHEEL

Little Man (at theatre)—I'm afraid you are in the wrong seat, old fellow.

Pugilist—You don't need to be afraid. That is, not unless you're thinking of making me move?

"Do you guarantee results in your nerve treatment?" asked the prospective patient.

Specialist—"I do. Why, a man came to me for nerve treatment, and when I had finished with him he tried to borrow $50."

Clerk—Have you an account with the store, madam?

Customer—No, but maybe I can arrange matters with your manager.

Clerk (to manager)—A lady of no account to see you, sir.

"Can you define heredity for us, Johnny?"

"Er, yessum. It means if your grandfather didn't have any children, then your father probably wouldn't have any and neither yould you, prob'ly.—Montreal Star.

I see where horse racing has been suggested as a new kind of intercollegiate contest.

Not a bad idea—the students surely ought to know about ponies.

"What time do you get up these days?"

"As soon as the first ray of the sun comes in at my window."

"Isn't that rather early?"

"No, my room faces west."

"I conversed yesterday with a German for three hours although I don't know any German."

"That was very clever—all by signs?"

"No, he speaks English perfectly."

"It's lucky that Nickelson got injured at the factory and can't work."

"Why, you heartless brute!"

"Not at all—he's getting workmen's compensation whereas most of his former fellow-employes have lost their jobs."

The candidate was unsparing in his criticism of his opponents and his audience was growing somewhat restless over his bombastic attitude. "So," he was saying, "I ask you, how much longer are you going to put up with this bunkum?"

And a big man up front who appeared to register the feelings of most of the others, replied, "We'll give you just five more minutes."

"How is your son doing in college?"

"Fine. He writes that he has matriculated already, and he hasn't been there a month."

Policeman (in court)—I'm sorry, Mr. Blurpus, that I arrested you for kissing a woman in the park. I didn't know it was your wife.

Blurpus—Oh, that's all right. Until you flashed the light into her face I didn't know it either.

"Your wife's a blonde, isn't she?"

"I'm not sure. She's down at the beauty parlor now."

New Suburban Gardener—I don't seem able to tell my garden plants from weeds. How do you distinguish between them?

Old Farmer—The only sure way is to pull 'em out. If they come up again, they're weeds.

"Is it true that my son has owed you for a suit for four years?"

"Yes. Do you want to pay for it?"

"No, I would like you to make me a suit."

When the president of the Los Angeles Chamber of Commerce was asked recently how the depression had hit Los Angeles, he replied: "Depression? We had no depression in Los Angeles; but I will admit that we are having the worst boom in many years."

"You don't mean to say that you sold your auto just because the government raised the tax on gasoline?"

"Yes, I'll ride around in taxicabs and busses before I'll contribute to any such gouging."

"When you marry me, darling, you'll have a woman in your home who sure knows how to cook."

"Why, I didn't know you could cook, my dear."

"I can't, but my mother's going to live with us."

Father—You lazy good-for-nothing! What would you have done if you had been brought up among people who lived by the sweat of their brows?

Blase Son—I would have sold them pocket handkerchiefs.

"So you're packing up to leave your husband? I thought you said he was the best man in seven states."

"He was, but I found better ones in the other 41."

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American Brakeblok's proved performance

1. No chattering
2. No scoring
3. No smoking or burning
4. No squealing
5. Feeds off
6. More ton miles of service
7. Constant coefficient of friction
8. Saves man power and time
9. Saves flanges
10. Cuts braking costs

Every one of the ten outstanding qualities of American Brakeblok as listed above has been proved in the most severe service to which an oil-well brake lining can be subjected.

As a result of its overwhelming superiority this utterly different, new-type brake lining is assuming unquestioned leadership. American Brakeblok is saving time, saving equipment and saving money wherever it is used.

American Brakeblok is as different in structure as it is in performance. The material itself is a dense, homogeneous solid, formed under pressure, heat-treated and accurately ground to size. Until the introduction of American Brakeblok, oil-well braking had been a serious problem.

American Brakeblok has solved it.

AMERICAN BRAKEBLOK
Reg. U.S. Pat. Off.

AMERICAN BRAKE MATERIALS CORPORATION • 4660 MERRITT AVENUE • DETROIT, MICHIGAN, U. S. A.

Industrial and Automotive Division **American Brake Shoe and Foundry Company**

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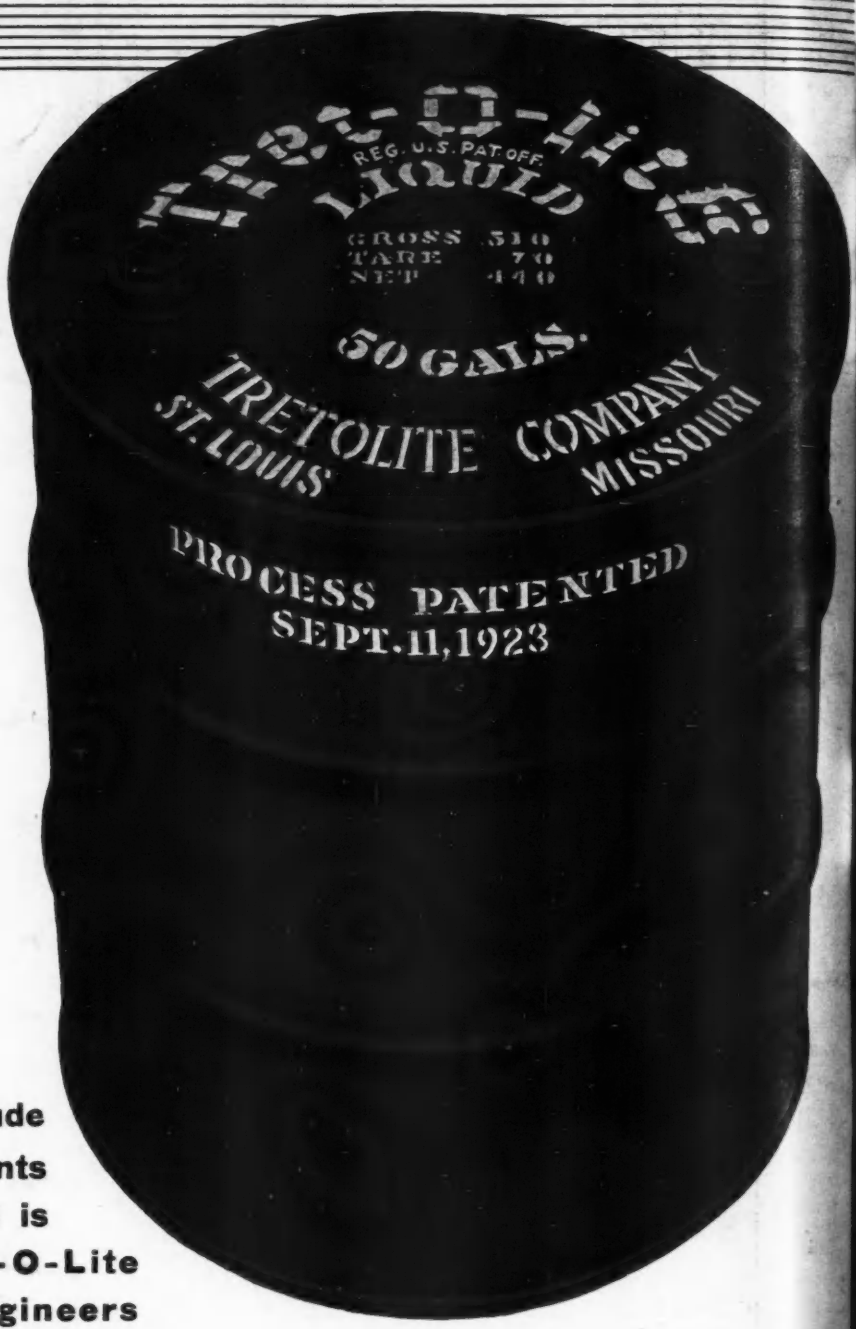

For treating B. S. and Crude Oil to pipe line requirements every conditioning need is fulfilled by suitable Tret-O-Lite formulas. Tret-O-Lite engineers furnish a dependable service to insure maximum results.

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REPRESENTATIVES IN ALL PRINCIPAL FIELDS

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